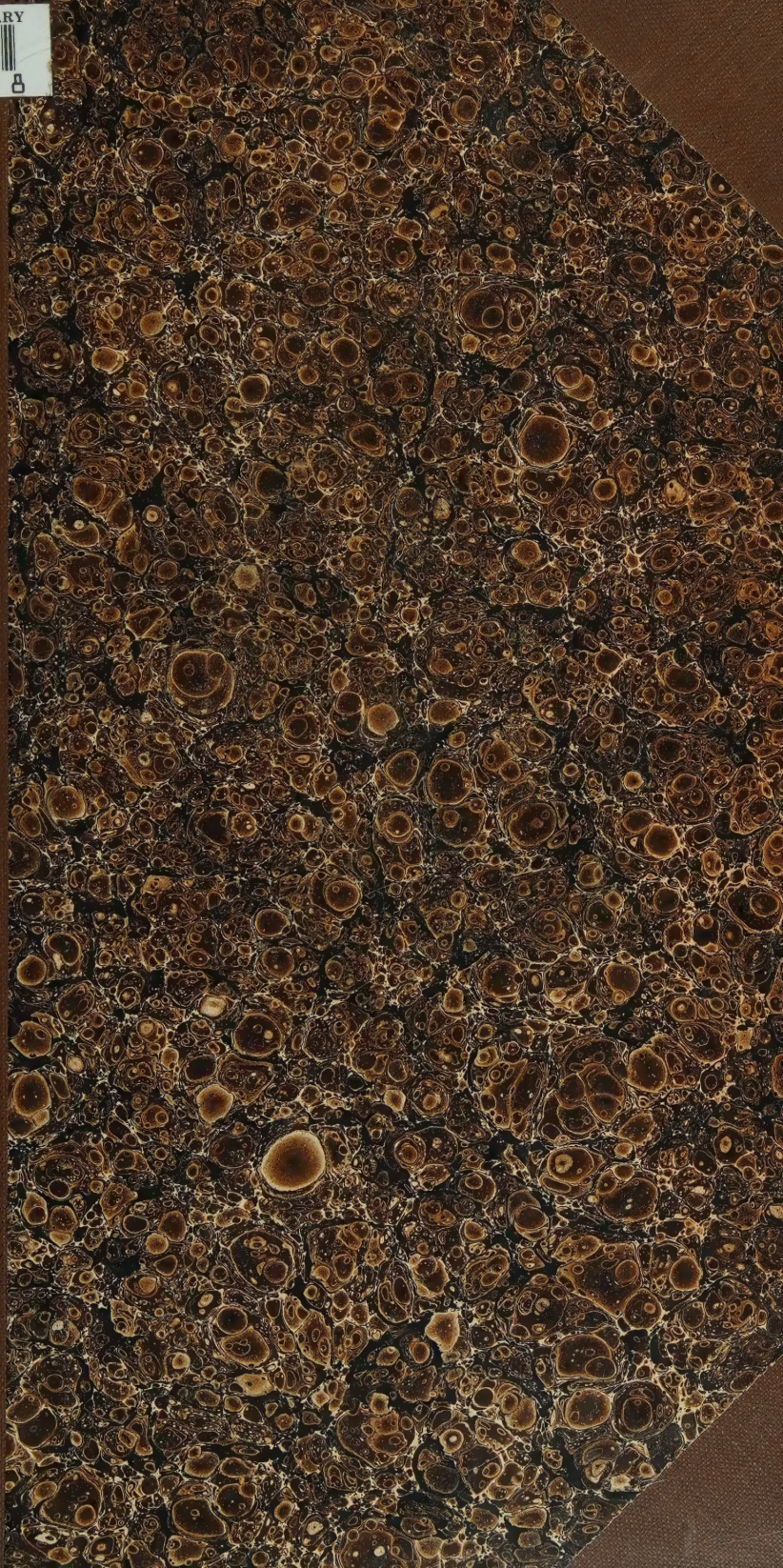


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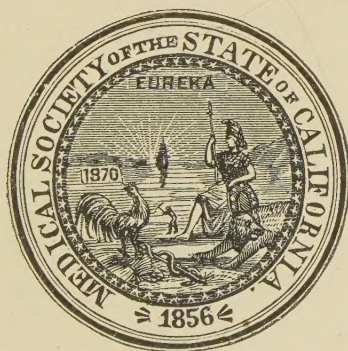


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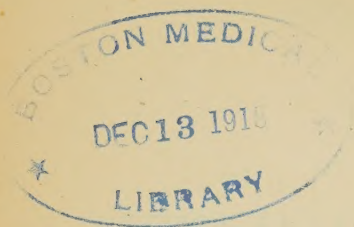
TRANSACTIONS
OF THE
MEDICAL SOCIETY

OF THE
STATE OF CALIFORNIA,

DURING THE YEARS 1873 AND 1874.



SACRAMENTO:
H. A. WEAVER, PRINTER.
1874.



REPORT OF COMMITTEE ON PUBLICATION.

The Committee on Publication, in presenting to the profession the proceedings of the Fourth Annual Session of the Medical Society of the State of California, take pleasure in acknowledging the general promptitude with which papers read before the Society were (as they should be) left with the Secretary. They would, however, beg leave to make two suggestions to authors of medical papers. The first is, that, before presenting a paper, it be written as if intended for publication; this would lighten the labors of the Committee, save them the unpleasant task of revision and, perhaps, excision, and thus prevent delay in publication. Secondly, they would suggest that authors make their papers as concise as possible, bearing in mind that it is the quality of and not the quantity in a paper that recommends it for a place in the Transactions. In the present volume some papers have been necessarily omitted, as the funds of the Society have no power of inflation, and must be conserved—the memorable Reform Legislature of 1873-4 having, in their wisdom, refused the usual appropriation to enable the Society to print its yearly work. The Committee, however, trust that what they have published will prove acceptable to the profession; that those whose papers have not had a place in this volume will blame the *reformers* and not the Committee, and that critics, and especially *hypercritics*, will spare their shafts, if any target presents itself throughout the volume, which might be open to the armature of these *toxophilites*.

GERRARD G. TYRRELL,

Chairman,

J. F. MONTGOMERY,

E. B. HARRIS,

F. W. HATCH, JR.,

H. P. BABCOCK,

Committee on Publication.

SACRAMENTO, July, 1874.

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ERRATA—On page 144, for the address of Dr. A. Andrei, read "San Francisco."



FOURTH ANNUAL MEETING
OF THE
MEDICAL SOCIETY
OF THE
STATE OF CALIFORNIA.

DEC 18 1874

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The fourth annual meeting of the STATE MEDICAL SOCIETY, since its organization, convened in Corinthian Hall, Mechanics' Institute Building, San Francisco, on Wednesday, April 15th, 1874, at ten o'clock A. M. The President, Dr. T. H. Pinkerton, in the chair.

The meeting having been called to order, Dr. J. F. Morse, Chairman of the Committee of Arrangements, welcomed the society in the following address :

MR. PRESIDENT : I am sorry that my health has made it impossible for me to assist in the labors of the Committee of Arrangements. To my colleagues on the Committee of Arrangements, who have kindly performed the labor of making preparations for your arrival, I could not refuse a request to prepare a few words of welcome.

"Welcome" is a volume in itself, and when pronounced, as in this case, with unhesitating cordiality, and with a desire that the spirit of hospitality shall demonstrate its sincerity, it seems doubtful if elaboration can add strength or interest to the beautiful dissyllable.

Wel-come means exactly what we feel. There is an infinite fitness in your visit. As the representatives of a diffused legit-

imate medicine, we need the meeting and intercourse which you propose to accord to us.

We know pretty well what medicine means in the city. You are much better judges of its significance in the country. But to understand all the essentials of our profession we must know its general as well as its local relations. In no way can this information be as easily or as accurately obtained as by organization and intercourse.

A profession which manifests no care for itself, which makes no effort to develop and conciliate that co-ordinating power which is so wonderfully utilized by exact government and specific obedience, will never be distinguished by its self-respect, nor by the consideration and homage of the public.

You are, therefore, welcome, if by our joint labor we can make secure, or advance to a higher point of enjoyment, the common interests and common weal of medicine.

The committee have desired me, especially, to assure you, Mr. President and gentlemen, that in their personal applications to the medical men of our city, in making provision for your comfort and pleasure, there has been manifested such uniform cordiality and friendliness, such a general desire to make your welcome a true one, and your sojourn with us a beautiful memory, that I find myself quite incompetent to embody so pleasant an assurance. Pleasant because it indicates wisdom, and inspiring because it denotes progress. We feel assured that in this very circumstance is to be found the complete fulfillment of conjectures indulged in at the last session of this society, when the claims of San Francisco were being urged as a suitable place for this meeting.

If through this reunion of medical men the State Society becomes enlarged, its measures materially improved, its area of operation extended, and its fraternal and psychological interests brought into complete consonance, it is not too much to hope that the society itself may be stimulated to labors in the protection of medicine, which have been long sought for, but which have been thus far, quite, if not completely useless.

Never in the whole history of the science of medicine was there a period more interesting to the medical mind, never were physiology and pathology presented with such wonderful results; never did the perceiving and discerning powers of the

mind get so near to a solution of the sources of life and their mystic maintenance.

Never were the boundaries of morphological health and heterologous disturbance defined with such clearness of relation and contour, or with such sharpness of outline. Never were mind and matter traced to such intimate relations and interrogated with such scrutinizing boldness. And never did enlightened society demonstrate such admiration for absolute truth, irrespective of educational bias or the inlaid notions of childhood.

And therefore, for this reason also, you are welcome to enjoy a season of friendly intercourse and mutual congratulation.

Gentlemen, we hope you will enjoy your annual meeting, and be permanently benefited by this visit to San Francisco. If in your peregrinations about our town you see with amazement the growth of a quarter of a century, if you contemplate with wonder the enormous capital already identified with the embellishment of city lots and the opening of almost innumerable streets, if your ears become wearied with an unaccustomed din of commerce and trade and struggle, if the accessibility of magnificent places of worship, of entertainment and recreation, of churches, of theaters, of libraries, and the palaces of John Barleycorn, astonish you with the contrasts of city and country life, be not too prompt to draw conclusions in our favor.

We are, and must be, the mere reflex of the country we represent. What we are, the country has made us, in commerce, in trade and medicine; and what you are and the country is, may be seen in our shops and offices, our habits and characters. When you become dissatisfied with country life and long for the noisier demands, the sharper conflicts, and the quicker results of our city, see if a little inquiry do not persuade you that we spend two hours to your one wishing for those very enjoyments you desire to throw away—the scenes and solitudes of a country home. Throughout all nature a Supreme intelligence and fixed laws have made infinitely varied the relations of man to the world and to one another, and therefore do we say again, Welcome for a full enjoyment of the superior and lasting benefits of professional intercourse and co-ordinate glances into our noble science.

On motion of Dr. R. Beverly Cole, the address was referred

to the Committee on Publication. In the absence of Dr. T. Ross, of Woodland, Dr. W. T. Wythe was elected Assistant Secretary pro tem.

Dr. W. A. Grover, from Committee of Arrangements, reported the names of the following gentlemen as present :

F. W. Todd, Stockton ; C. P. Chesley, San Francisco ; G. G. Tyrrell, Sacramento ; R. H. Plummer, San Francisco ; A. B. Caldwell, Marysville ; L. Robinson, Colusa ; R. Beverly Cole, H. Gibbons, Sr., H. Gibbons, Jr., W. A. Grover, G. J. Van Vlack, J. F. Morse, and A. S. Ferris, San Francisco ; W. P. Gibbons, Alameda ; T. M. Logan, Sacramento ; R. W. Murphy, Sacramento ; W. T. Wythe, San Francisco ; C. A. Kirkpatrick, Redwood City ; N. Williams, Richland ; H. P. Babcock, Oakland ; W. L. Twichell, San Francisco ; T. H. Pinkerton, Oakland ; C. T. Sage, San Leandro ; C. Black, San Francisco ; P. Chamberlain, San Francisco ; J. S. Adams, Oakland ; James Simpson, San Francisco ; M. Baker, Visalia ; W. W. Bamford, Oakland ; B. D. Dean, San Francisco ; J. M. Brown, U. S. N., Mare Island ; J. J. Franklin, Sonora ; W. F. Cheney, Chico ; M. C. Parkinson, Antioch ; C. M. Bates, San Francisco ; W. F. Smith, San Francisco ; E. T. Wilkins, Marysville ; E. N. Foote, Lockport ; H. M. Fisk, San Francisco ; James Wayland, Chico ; A. Trafton, Woodbridge ; S. M. Tibbitts, San Francisco ; A. B. Stout, J. M. Willey, H. S. Baldwin, J. D. Callaghan, W. T. Bradbury, and L. C. Lane, San Francisco ; C. S. Coleman, San Leandro ; J. P. Reilay, Oakland ; G. E. Sherman, Oakland ; A. G. Soule, John Scott, J. C. Tucker, J. P. Whitney, George Hewston, P. W. Randle, J. Millington, A. A. O'Neil, C. B. Brigham, Charles Ellenwood, B. F. Hardy, James A. Smith, C. F. Buckley, and James Murphy, San Francisco ; J. C. Van Wyck, Oakland ; G. W. Graves, Petaluma ; C. Fisher, Sacramento ; J. H. Urich, Geyserville ; C. Rowell, San Francisco ; A. Flint, Lincoln ; A. B. Nixon, Sacramento ; A. B. Mehring, Woodland ; J. H. Crane, Petaluma ; James Mooklar and J. D. Whitney, San Francisco.

Dr. H. Gibbons, Sr., moved that the calling of the roll be dispensed with ; several members objecting, he withdrew the motion. The roll being then called, seventy-six members responded to their names.

Dr. Babcock moved that the reading of the minutes of last session be dispensed with.

Lost.

Dr. Logan moved that the minutes of the last session be approved as published.

Carried.

Dr. Tyrrell, Chairman of the Board of Censors, reported favorably upon the following named gentlemen, who desired to become members of the society :

<i>Name.</i>	<i>Residence.</i>	<i>School.</i>	<i>Date.</i>
James Mooklar.....	San Francisco.....	Medical College of Ohio.....	1865
C. G. Kenyon.....	San Francisco.....	Medical College Pacific.....	1873
John D. Wilson.....	San Francisco.....	Medical College Pacific.....	1872
John M. Willey.....	San Francisco.....	Royal College Surgeons, Ireland..	1848
Chester Rowell.....	San Francisco.....	University of Pacific.....	1870
Charles E. Blake.....	San Francisco.....	Medical College Pacific.....	1873
John Wagner.....	San Francisco.....	Medical College Pacific.....	1872
Adolph Barkan....	San Francisco.....	University of Vienna.....	1866
L. Welges.....	San Francisco.....	University of Berlin.....	1859
Quirtius C. Smith.....	Cloverdale.....	University Nashville, Tenn.....	1868

On motion of Dr. Logan, the report was received.

On motion of Dr. R. B. Cole, the Secretary was authorized to cast the ballot of the society for the gentlemen named, which having been accomplished they were declared duly elected members.

The Secretary then read in Latin a letter from Professor Hyrtl of Vienna, returning his thanks to the society for their action in conferring membership on him.

On motion of Dr. R. B. Cole, the letter was placed on file.

On motion of Dr. W. A. Grover, Dr. J. H. Yocum, member of the State Medical Society of Pennsylvania, was invited to a seat in the society.

Dr. Todd moved that a similar invitation be extended to Dr. Mason, of Boston.

Carried.

Dr. Gibbons, Sr., moved that the medical officers of the Army and Navy present be invited to seats on the floor.

Carried.

Dr. B. D. Dean offered the following resolution:

Resolved, That the sessions of this society be held until further orders, as follows, viz : from ten o'clock A. M. to one o'clock P. M., and from two to five P. M., and seven to ten P. M.

Adopted.

Dr. Pinkerton then read the annual address, which, on motion of Dr. R. Beverly Cole, was referred to the Committee on Publication.

A recess of ten minutes was then taken for the purpose of giving the county societies an opportunity of electing members of the Nominating Committee.

The society having been called to order, the Secretary read the following names constituting the Nominating Committee for officers for the ensuing year:

T. M. Logan, Sacramento; J. S. Adams, Napa; M. Baker, Tulare; J. P. Whitney, San Francisco; J. F. Wayland, Butte; L. Robinson, Colusa; J. M. Brown, Solano; H. P. Babcock, Alameda; J. H. Crane, Sonoma; M. C. Parkinson, Contra Costa; A. Trafton, San Joaquin; E. B. Robertson, Calaveras.

Dr. George Hewston moved that when but one member is present from a county, he be appointed on the Nominating Committee.

Carried.

Adjourned until two o'clock.

AFTERNOON SESSION.

The society was called to order at two P. M. The minutes of the morning session having been read, were corrected, and approved as amended.

On motion of Dr. Tyrrell, Dr. R. D. Mauzey, of Indiana State Medical Society, was invited to a seat in the convention.

The Board of Censors having reported favorably, the following named gentlemen were elected to membership:

<i>Name.</i>	<i>Residence.</i>	<i>College.</i>	<i>Date.</i>
C. H. Allen.....	Centreville.....	Med. Dep. of Univ. of Virginia.....	1857
E. H. Woolsey.....	Oakland.....	Buffalo Medical College.....	1868
Samuel McCurdy.....	Klamath Co.....	Medical College Pacific.....	1868
Hezekiah J. Crumpton.....	Lakeport.....	Rush Medical College.....	1871
Charles M. Fenn.....	San Diego.....	Toland Medical College.....	1865
Jacob L. Asay.....	Visalia.....	Pennsylvania University.....	1859
Gilbert J. Van Vlack.....	San Francisco.....	Univ. Queen's College, Canada.....	1868
W. J. Younger.....	San Francisco.....	University of Pacific.....	1860
George H. Powers.....	San Francisco.....	Harvard University, Mass.....	1865
H. S. Orme.....	Los Angeles.....	University of New York.....	1861
Joseph Hammend.....	Lockford, S. Joaq'n.....	Medical College Pacific.....	1873
G. B. Keane.....	San Francisco.....	Toland Medical College.....	1865
Josiah H. Crane.....	Petaluma.....	University St. Louis.....	1844
John B. Christie.....	Petaluma.....	McGill College, Canada.....	1865

The Chairman of Committee on Practical Medicine, Dr. George Hewston, was not prepared with any report upon the subject.

Dr. F. W. Todd, Chairman of Committee on Obstetrics, presented a report, which, when read, was referred to Committee on Publication.

Dr. C. Cushing, of Oakland, sent in a supplementary report upon Obstetrics, which was read by Dr. Todd and referred to Committee on Publication.

Dr. L. C. Lane, Chairman of Committee on Surgery, had no report prepared to present to the Society.

Dr. W. P. Gibbons, Chairman of Committee on Indigenous Botany and Adulteration of Drugs, requested further time to make his report, which, on motion, was granted.

Dr. G. A. Shurtleff, Chairman of Committee on Mental Diseases and Medical Jurisprudence, had no report to present to the Society.

Dr. J. H. Wythe, Chairman of Committee on Histology and Microscopy, presented a report, which was read by W. T. Wythe and referred to Committee on Publication.

Dr. Pinkerton, on account of recent illness, retiring, the chair was occupied by Dr. Brown, U. S. N., Vice President.

On motion of Dr. W. P. Gibbons, Dr. George E. Sherman, of Oakland, was invited to address the society upon the subject of Putrefaction.

Committee on Prize Essays reported that they had received no essays.

The report of the Committee on Publication was read by Dr. Tyrrell, Chairman of committee, and accepted.

The Treasurer's report was read and, on motion of Dr. Logan, was referred to a committee of three, appointed by the Chair. The President appointed Drs. Logan, Cole, and Trafton said committee.

Dr. Tyrrell, of Sacramento, presented the following amendment to the Constitution :

ARTICLE 7, SECTION 3. Any member who shall fail to pay his annual dues for two successive years, unless absent from the State, shall be dropped from the roll of members, after having been notified by the Permanent Secretary of the forfeiture of

his membership, and no member so dropped shall be reinstated in his membership until he shall have paid all arrears due by him.

Dr. Murphy thought this rule would be too stringent, and Dr. Cole proposed inserting after "unless absent from the State," "or for other reasonable causes," which was accepted, and the amendment laid over under the rules.

The Secretary then read the resignation of Dr. W. T. Wythe, owing to removal from Sacramento to San Francisco, as Permanent Secretary, and notified the society of his appointment by the President under the Constitution.

On motion of Dr. R. B. Cole, the action of the President in this matter was confirmed.

An invitation was received from the Board of Health to visit City and County Hospital and the Alms House.

Dr. Gibbons moved that the invitation be accepted.

Carried.

Dr. Cole moved that the fourth article in the order of business be stricken out.

It was so ordered.

Dr. Tyrrell read a paper by Dr. Dutton, of Tomales, upon "Fracture of the Femur," which was referred to the Committee on Publication.

Dr. C. B. Brigham exhibited Dieulafoy's Aspirator, and explained its operation; also some models of Pathological Specimens, by Barrette, of Paris, representing Acute Excema of the leg and thigh; also, Melanoid Cancer of the thigh at the knee joint. He also exhibited an elbow joint, resected subperiostially, and the patient from whom it had been removed.

The Board of Censors having reported favorably Dr. C. F. Buckley, San Francisco, College of Surgeons, Edinburgh, 1864, and Queen's University, Ireland, 1865, was duly elected to membership.

Dr. Van Wyck, of Oakland, read a paper upon "Amputation of both legs after a Modification of Esmarch's Method of Controlling Hemorrhage;" also a paper upon Infantile Hygiene; which were referred to the Committee on Publication.

The society then adjourned until seven P. M.

EVENING SESSION.

The society having been called to order at seven P. M., by Dr. Brown, Vice President, the minutes of afternoon session were read and approved.

The Board of Censors having reported favorably, the following gentlemen were balloted for and duly elected members of the society :

<i>Name.</i>	<i>Residence.</i>	<i>School.</i>	<i>Date.</i>
L. W. Hays.....	San Francisco.....	Jefferson Medical College, Penn...	1844
E. D. Martineau.....	San Francisco.....	University of California.....	1873
George Chismore.....	San Francisco.....	Medical College of Pacific.....	1873
Gustave H. Malich.....	San Francisco.....	Medical College of Philadelphia..	1850

The President announced that the reading of the report of Dr. Logan, Chairman of Committee on Hygiene and State Medicine, would be deferred until the morning session in order to afford Dr. Morse an opportunity of being present.

Dr. W. F. Smith then presented a paper embracing his report upon Ophthalmology and Otology for 1873.

Referred to Committee on Publication.

Dr. A. Trafton, of Woodbridge, then read an interesting paper upon "Foreign Bodies in the Human Alimentary Canal," and exhibited specimens. He also read notes of a case of supposed Splenic Abscess.

Dr. Trafton's papers were referred to the Committee on Publication.

Dr. A. A. O'Neil invited the society to visit the Medical Department of the University of California, which was on motion accepted.

Dr. John Scott offered a few remarks upon the new Anesthetic, lately used by Dr. Richardson, of London; a mixture of the Bichloride of Mythelene and pure Ether in equal parts. Dr. Scott had now used it most successfully thirty times. His experience was that it produced no convulsive efforts like Ether or Chloroform; that the circulation was but slightly accelerated; the face became somewhat suffused, tranquil sleep ensued, and was not followed by vomiting or other unpleasant effect.

After some discussion upon the properties of the new Anesthetic, participated in by Drs. Scott, Gibbons, Sr., R. B. Cole,

A. B. Stout, James Simpson, and G. W. Graves, the society adjourned until ten A. M. to-morrow.

MORNING SESSION—APRIL 16TH, 1874.

The society having been called to order by the President at ten o'clock A. M., the minutes of the previous evening session were read and approved.

The Board of Censors having reported favorably, the following gentlemen were duly elected to membership in the society :

<i>Name.</i>	<i>Residence.</i>	<i>School.</i>	<i>Date.</i>
George W. Davis.....	Langwell, Yolo Co...	Missouri Medical College.....	1870
I. S. Titus.....	Stockton.....	Cleveland Medical College.....	1848
Fred. E. Bailey.....	Santa Cruz.....	Western Reserve College.....	1847
James Burns Gordon.....	Sonoma.....	University of Virginia.....	1847
Alfred E. Regensberger...	San Francisco.....	Col. Physicians & Surg'ns, N. Y..	1872

Dr. T. M. Logan, Chairman of Committee on Nominations, reported the following names as the choice of the committee :

President—J. M. Brown, U. S. N., Solano.

Vice Presidents—First Vice President, A. B. Nixon, Sacramento ; Second Vice President, W. F. Cheney, Butte ; Third Vice President, M. Baker, Tulare ; Fourth Vice President, R. K. Reid, San Joaquin.

Permanent Secretary—G. G. Tyrrell, Sacramento.

Assistant Secretaries—A. B. Caldwell, Yuba ; W. T. Wythe, San Francisco.

Treasurer—I. E. Oatman, Sacramento.

Board of Censors—G. G. Tyrrell, Chairman, Sacramento : W. R. Cluness, Sacramento ; F. W. Hatch, Sacramento ; J. L. Asay, Tulare ; S. Langdon, San Joaquin.

Permanent place of meeting, Sacramento.

The committee also reported the following :

Resolved, That the Committee of Arrangements prepare for the Annual Banquet of the society and levy an assessment on each member present to defray the expenses thereof.

THOS. M. LOGAN, Chairman.

H. P. BABCOCK, Secretary.

On motion, the report was received and the committee discharged.

Dr. Logan, Chairman of Committee on Public Hygiene and State Medicine, read his report.

Dr. Wilkins moved that the paper be now considered.

Dr. R. B. Cole offered as a substitute that Dr. Logan's paper be referred to the Committee on Publication, and that the consideration thereof be made the special order for four o'clock this P. M.

So ordered.

Dr. W. P. Gibbons, Chairman of Committee on Indigenous Botany and Adulteration of Drugs, then read a paper upon "The Grindelia Robusta, with cases illustrating its action in Asthma and Pertussis," which was referred to Committee on Publication.

The Board of Censors having reported favorably, the following named gentlemen were elected to membership in the society:

<i>Name.</i>	<i>Residence.</i>	<i>School.</i>	<i>Date.</i>
Adolph Andrei.....	San Francisco.....	University of Florence, Italy.....	1861
Curtis E. Price.....	Angel Island.....	U. S. Army.....	
Warren Webster.....	Alcatraz	U. S. Army.....	
James Murphy.....	San Francisco.....	Medical College of Pacific.....	1862
James A. Smith.....	San Francisco.....	University of Pennsylvania.....	1855

Dr. A. Barkan then read a paper upon Foreign Bodies in the Eye, which was referred to the Committee on Publication.

Dr. W. P. Gibbons moved that Dr. C. S. Kittredge be permitted to read his paper by title, and that it be referred to the Committee on Publication.

It was so ordered, and the title, "Contribution to the Vital Statistics of the State of California" was read.

Dr. Andrei read a paper upon "The Various Methods of Treatment of Anchylosis of the Knee Joint," which was referred to the Committee on Publication.

Dr. Logan moved that the President and Secretary be authorized to issue credentials to Drs. L. C. Lane and C. F. Buckley as delegates to American Medical Association.

An invitation was received from Dr. Hardy to visit the lying-in hospital, which was on motion accepted.

The meeting then adjourned until two P. M.

AFTERNOON SESSION.

The society having been called to order at half past two

P. M., Dr. J. M. Brown, Vice President, in the chair, the minutes of the morning session were read and approved.

The Censors having reported favorably, Dr. J. L. Mears, San Francisco, Jefferson Medical College, 1846, was duly elected a member of the society.

Dr. H. H. Toland exhibited a patient, showing the result of a successful resection of the elbow joint. The patient was examined by the members present, and performed various movements of the arm, showing considerable muscular and articular power. Dr. Toland also presented to the society a young girl, on whom he had successfully resected the ankle joint, removing at the same time the tarsal bones which had been crushed.

Dr. R. B. Cole moved that Dr. Greenslade, of London, and now present, be invited to take a seat in the society.

Carried.

Dr. R. B. Cole then presented a specimen of twin birth, closely united by a fleshy band extending from the ensiform cartilage to the pubes, having but one umbilical cord, and showing the umbilical vesicle well marked. Dr. Cole also explained his theory of the manner in which delivery is effected in such cases.

Dr. T. M. Logan moved that the President and Secretary be instructed to issue credentials to Drs. T. H. Pinkerton, J. P. Whitney, and John T. Crook as delegates to the American Medical Association.

It was so ordered.

Dr. R. B. Cole moved that the President and Secretary be authorized to issue credentials to any member of this society who desires to attend the meeting of the American Medical Association as a delegate.

It was so ordered.

Dr. C. B. Brigham read a paper upon Urethral Stricture, which was referred to Committee on Publication.

Dr. E. T. Wilkins read a paper upon Hypnotism, which was referred to the Committee on Publication.

The hour having now arrived for the consideration of Dr. Logan's paper, and the question being upon the adoption of Dr. Morse's resolution, remarks were made upon the subject by Dr. R. B. Cole and Dr. Morse.

Dr. Gibbons, Sr., offered the following :

Resolved, That it is desirable that there should be a uniform system of examination for the degree of Doctor of Medicine apart from the institutions for teaching, so that the diploma shall be awarded to all competent candidates, and that the profession and society at large shall be secured against the possibility of the degree of Doctor of Medicine being conferred upon unworthy or incompetent individuals.

Resolved, That a committee of five be appointed by the Chair to prepare and present at the next meeting of the society some plan by which the said object may be accomplished.

The amendment being accepted by Dr. Morse, the resolutions were unanimously adopted.

The meeting then adjourned until seven P. M.

EVENING SESSION.

The meeting was called to order at seven P. M., the President, Dr. Pinkerton, in the chair. The minutes of the afternoon session were read and approved as read.

The President then announced the following named gentlemen as those he had selected to form the committee to prepare a plan for a uniform system of medical examination: J. F. Morse, G. A. Shurtleff, T. M. Logan, H. Gibbons, Sr., and George Hewston.

The following officers were then unanimously elected for the ensuing year :

President—J. M. Brown, U. S. N., of Solano.

Vice Presidents—A. B. Nixon, of Sacramento ; W. F. Cheney, of Butte ; Martin Baker of Tulare ; R. K. Reid, of San Joaquin.

Permanent Secretary—Gerrard G. Tyrrell, of Sacramento.

Assistant Secretaries—A. B. Caldwell, of Yuba ; W. T. Wythe, of San Francisco.

Treasurer—Ira E. Oatman, of Sacramento.

Board of Censors—G. G. Tyrrell, of Sacramento ; W. R. Cluness, of Sacramento ; F. W. Hatch, of Sacramento ; S. L. Asay, of Tulare ; Samuel Langdon, of San Joaquin.

On motion, it was resolved that Sacramento be the next place of meeting.

On motion of Dr. Chamberlain, that portion of the report of

the Committee on Nominations in relation to the annual banquet was indefinitely postponed.

Dr. Logan reported that the accounts of the Treasurer were examined and found correct.

Report was received and the committee discharged.

The Secretary, in the absence of the Treasurer, was authorized to pay all bills contracted during the present session ; and also the salary of the Secretary.

On motion of Dr. Simpson the dues of the Assistant Secretaries were remitted.

Dr. Woolsey, of Oakland, gave an abstract of a paper upon "Antiseptic Surgery," and exhibited specimens of Dr. Liston's antiseptic dressings.

The paper was referred to Committee on Publication.

Dr. C. F. Buckley presented a paper upon Urinary Fistula, which was referred to Committee on Publication. He also exhibited a pathological specimen of Encephaloid disease of the kidney, taken from a child. The mass weighed several pounds. Dr. Buckley was, on motion, elected a delegate to the British Medical Association.

On motion of Dr. Gibbons, Sr., the Secretary was authorized to issue credentials to any member of the society desirous of visiting any foreign medical association.

Dr. J. P. Whitney presented the following amendment to the Constitution :

Resolved, That the Standing Committees shall constitute sections, after the manner of the American Medical Association, to whom all papers shall be referred upon the first day of the session, and who shall report to the society those papers that seem of sufficient interest for reference to the Committee on Publication ; also those that seem of sufficient importance to be read before the society, by title, abstract, or in extenso, upon the second day of meeting.

Laid over under the rules.

On motion of Dr. Grover, Dr. Tallon, U. S. Army, was elected an honorary member.

The Board of Censors reporting favorably, Dr. Julian Sylvester, San Francisco, University of California, 1872, was duly elected a member.

Dr. H. Gibbons, Sr., read a paper entitled "A Contribution to

the Literature of Quackery," which was referred to the Committee on Publication.

Dr. L. C. Lane offered a contribution to surgery, which was referred to Committee on Publication.

Dr. John Millington gave an abstract from his paper on "Counter Extension, after a New Method," and the paper was referred to the Committee on Publication.

Dr. Washington Ayer presented a paper upon "Uterine Polypi, with Cases," which was referred to the Committee on Publication. He also exhibited several uterine instruments for the removal of these growths.

The minutes of the meeting were read and approved.

A vote of thanks was offered to the retiring officers, and the meeting adjourned until the third Wednesday in April, 1875.

GERRARD GEORGE TYRRELL,
Permanent Secretary.





ANNUAL ADDRESS

DELIVERED BEFORE THE

CALIFORNIA STATE MEDICAL SOCIETY.

BY T. H. PINKERTON, M. D., PRESIDENT.

GENTLEMEN OF THE MEDICAL SOCIETY OF THE STATE OF CALIFORNIA: In accordance with the rule and custom of this society it becomes my duty as President to present to you my annual address.

In view of the resolution presented at the last session by Dr. J. F. Morse, and by a vote of the society laid over until this meeting, I have chosen for my subject "The Necessity for a Higher Standard of Medical Education," and added a few suggestions in regard to what might be obtained.

Much has been done in the past four years by the members comprising this society to advance the science and interest of the medical profession throughout the State. The reports made by the several Standing Committees have been such as to reflect credit upon their authors; and every part of the State having been represented, to-day we stand as a medical organization, whose existence is welcomed and honored by the profession of the State.

California, with her varied climate and means of investigation, can do more to advance the science of medicine and surgery, than is vouchsafed to many of her sister States, but to do this it requires the united efforts of the entire profession.

It is a fact well established that the influence and usefulness of every society or body of men depends upon the zeal and harmony existing in and put forth by the organization.

In order that the educated physician may place himself in his proper attitude before the community we must call for a

more thorough medical education. An education such as shall draw the line of distinction between the true physician and the empiric.

It has long since been proven by the futile attempts at legislative interference that but little can be expected from that source alone, while the medical profession is willing to accept into its ranks men who are graduated from some of our medical colleges whose reputation exists in the numbers, rather than the quality of their graduates.

It is this class of graduates which keeps the rank and file of the empirical army always full. And they, very naturally, claim to be graduates of the regular school; yet, not being able to comprehend the science of medicine, they are ready to declare the old school system to be a failure. Their only refuge and their only prospects for financial success are to be found in the infinitesimal dose, or in some of the other branches of empirical practice; and with the multitude, all who call themselves Doctors are supposed to be able to prescribe intelligently.

There is a book published some three hundred years ago which professes to give an account of the notable sayings and doings of the fools of England; it is a fair illustration of the present time.

The fool of Nottingham being asked by his master what profession or calling had the greatest number within its ranks in that town, replied: "Truly, master, I think there be many more physicians in Nottingham than men of any other pursuit." "A very fool thou art," replied his master; and the fool rejoins, "I will prove what I have said." He was encouraged to do so by the promise of a gold piece. So he went about the town with his face tied up as if suffering from a dreadful toothache. Everybody he met pitied him; everybody too prescribed for him; he noted their names and their nostrums. Being seen last by his master and getting his prescription, he submitted the whole list, and his master acknowledged that he had proved his saying.

Can any one of us doubt that a similar investigation would lead to the same results in our own day and in the towns or cities in which we live? Is there not even reason to believe that the number of those who depend upon regularly educated physicians for counsel and advice is less among us than in other

countries and other times? The precocious habits of our country have, of course, been felt in the medical profession.

In most of the schools of Europe, medical honors are not conferred until after a novitiate of four and more frequently five years, during which an extensive circle of sciences is obliged to be mastered and the candidate to be approved by a series of strict examinations. Not only are the essential branches of medicine required to be fully understood, but they must be preceded by a knowledge of the subsidiary sciences, and must also be confirmed by practical and clinical experience. With us, on the other hand, the short period of three preparatory years devoted to regular study and lectures may be said to constitute nearly the sum total of a medical education; for the collateral requirements are so small that their acquisition is often effected during the same three years which are applied to the other branches. Thus a young man who has learned to read and write, issues from the village school, or perhaps the plow, and in three years receives his diploma, and is declared competent to practice the profession of medicine in all its departments. As it often happens in this and similar cases, the newly approved candidate sends forth his anxious glance, directed, not always to his own deficiencies or the means of supplying them, but to that common goal and object of a young man's inquiry, which is to fill up the measure of his practical aspirations—"an opening." By the fortunate discovery of a settlement in some distant part of the State, or in some promising newly-discovered mining district, he finds himself perhaps at short notice installed (under virtue of the acquiescent silence of the small community in which he lives) the constituted physician of the place.

In one month, perhaps in less time, he may be called upon to diagnosticate organic lesion in a case of life and death, or to treat the more formidable convulsive diseases. There may be no consulting physician within many miles, at least, none who can arrive in season for the emergency. The safety, and probably the lives of the unfortunate constituents of this young man will depend upon the question whether he has or has not been truly educated; whether his mind and hand have been adequately trained for the great occasions that await him. It is not enough that he has suffered three years to expire whilst

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in the office of a city physician; nor that he has passed a corresponding time with some country practitioner. It is not enough that he has carelessly read the works of approved authors, and has squeezed through the too often mere matter of form examinations. If he has done only this, it is more than probable that failure awaits himself and disaster his patients.

In making the proper investigation regarding the standard of medicine and surgery, it must be obvious to all inquirers that the subject of medical education, which is of profound interest to the profession in every part of the country, is of special importance in California. We are so far from the older medical schools that it is desirable to build up among ourselves institutions which shall serve the double purpose of training up practitioners of medicine, and of affording opportunities to make special researches in the different branches of our science.

A school of medicine, like every other higher institution of education in our day, must be devoted to the *advancement* of learning, as well as to its *diffusion*.

There are in California local and climatic considerations in regard to the development and cure of diseases which call for the careful and prolonged study of competent specialists. As the State becomes more and more favorably known as a resort for invalids, and earns the name of a *sanitarium*, it becomes necessary that the peculiarities of different geographical regions, and their influence upon the healthy and upon the sick should be noted with scientific precision.

While every physician in his own locality becomes something of an authority upon these points, we must look to the schools of medicine for the bringing together of the experience and observations of many different places, and for their discussion in accordance with the established principles of sanitary science.

Thus, in a short time, the knowledge of individuals becomes the knowledge of the profession, and positive advancement is secured in the treatment of disease. A State so vast in area, so diversified in physical structure, so peculiar in all its climatic conditions as California, affords a fine field for investigation and discovery.

To our schools of medicine we should look for the latest and most accurate announcements of medical and surgical progress

elsewhere. Very few of those who are absorbed in the laborious duties of a full round of practice can keep themselves acquainted with the rapid advancement of all the specialties of modern surgery and medicine. The well-organized school of medicine distributes the various branches of the healing art among many devotees, each of whom may be presumed to have a special fitness for, or interested in, the special department of which he is the professor. He becomes an authority, not merely because of his own success as a practitioner, but because of his acquaintance with the latest and most approved methods and theories which have been elsewhere suggested.

In short, we may say that in proportion to the ability with which a school of medicine promotes original investigation and accumulates the experience of other States or lands, or in other words, in proportion to its real scientific standing, will be its usefulness and power.

In the training up of students of medicine, the modern progress of higher education has suggested many improvements; some of which it is generally thought might be at once engrafted upon our own institutions, to the very great advantage of the profession.

The youth of these schools is favorable to some changes which the routine of venerable traditions elsewhere has rendered difficult. Our distance, too, from renowned rivals gives us freedom to mark out independently the course which seems best. For example, a good preliminary education (to be ascertained either by the exhibition of a college diploma, or by the passing of an entrance examination,) should be required of every candidate who proposes to pursue the intricate, difficult, and all-including science of medicine.

The excellent course of study now given in public high schools, and the special advanced instructions which is likewise gratuitously offered in the University of California, make it possible for every student of medicine to begin his professional course, not only with a good English education, but with accurate knowledge of the principles of natural philosophy, analytical chemistry, comparative anatomy, zoology, and botany. These scientific foundations are indispensable to professional success; they should be laid before the superstructure of medical instruction is begun; they should be required as

preliminary to the study of medicine. It is also most desirable that there should be a sequence, natural and philosophical, in the order of medical studies, or in other words, that those topics which are general and fundamental should first be thoroughly mastered, and that the specialties of the profession should be reserved to the close of the course.

A classification of the studies, having in view an orderly development of medical science, when once established, would be as advantageous to the youthful aspirant for knowledge as to the experienced teacher.

Finally, the diploma of a school of medicine should bear the imprint of truth ; it should be the token to the world that the candidate whose name it bears has faithfully and successfully mastered the elements of his chosen profession. It can never be a prediction of his skill in practice ; but it should always be indisputable evidence that the scholar who bears it is neither ignorant or negligent. While it cannot foretell, it should record. It should not have a single signature which has been thoughtlessly written down, for it should be the personal certificate of every professor who signs it, and of every examiner who countersigns it, that the candidate whose name it bears has truly mastered the elements of his calling.

From these three considerations, the admission to, the progress in, and the closing of, a course of medical study, I pass to a brief discussion of two others of almost equal importance.

The time has certainly come when an effort should be made to secure endowments for our medical schools ; so that the professors may not be too much absorbed by the daily duties of a practitioner, in order to secure a support, and also in order that there may be no temptation to swell the catalogue of students for the sake of the fee they pay.

Doubtless, with a persistent effort on our own part, as a society of medical men, foundations would sooner or later be secured for a Californian school of medicine.

The same enthusiasm for learning which has led to the endowment of schools and colleges, the same desire to relieve the woes of sick and suffering humanity, which has built up hospitals and infirmaries, can doubtless be directed to the establishment of schools of medicine, which simultaneously rank

among our highest institutions of science, and among our noblest charities.

Once more, persistent efforts should be made to secure enlightened legislation on all subjects pertaining to medical education. Doubtless the extent to which quackery and nostrums are so influential, may be attributed in no small degree to the lack of such laws as will secure the lowest educated physician protection in his calling, and as will compel the ignoramus to refrain from tampering with the laws of life and health.

So long as the laws permit uneducated and incompetent persons to advertise themselves as "Doctors of Medicine," and so long as the newspapers, even the religious newspapers, will publish advertisements of nostrums and panaceas, so cunningly worded and printed, that they have the aspect of editorial indorsement, so long will medical science be checked, and humanity be permitted unnecessarily to suffer.

Our remedy seems to be: *First*—the enforcement of some such act as was proposed at our last meeting by Dr. Oatman, and indorsed by this society, but which failed before our Legislature; *Secondly*—one equal in importance—the measure so often advocated by the National Association, previously referred to, as brought up at our last session by Dr. Morse, providing for an independent Board of Medical Examiners, whose certificate as to the competence of an individual to practice in our profession should entitle him to a diploma from the University, without reference to the school from which he obtained his medical education, and that without such diploma no one could legally presume to practice. The subject, I am happy to say, will be brought before us at this session, and it is to be hoped that it will not fail, as for twenty-three years past it has done in the National Society, through the misguided efforts of those whose position as teachers in our schools *should* cause them to labor for the highest standard of medical education. We have only to look to any part of the State to find medical men of the highest ability who are in every particular qualified as teachers or medical examiners, if required so to act.

The percentage of graduates from the different medical schools in America during the past ten years, who could pass a satisfactory examination before a governmental Military Medical Board of Examiners, is altogether too small for the public

good or the credit of the profession. In view of these facts, something should be done to remedy this evil.

Let California unite her efforts with Harvard University, in Massachusetts, Bellevue College, in New York, the University of Pennsylvania, and Jefferson College, in Philadelphia, the only institutions of medicine in this country whose diploma is recognized in Europe, and we shall place the standard of medical education in the "Golden State," where the profession will feel honored and the public confidence in the regular school of medicine be fully restored.





REPORT ON OPHTHALMOLOGY AND OTOTOLOGY.

BY WM. F. SMITH, SAN FRANCISCO.

In attempting to prepare a report on Ophthalmology and Otology worthy of your attention as general physicians, I have been embarrassed as to which cases, among the curiosities of this specialty that I have met with during the past year, would be of the greatest interest to you.

Being convinced, however, that the medical journals of our coast have supplied the demand for curiosities, I have believed that it might not be inappropriate to present a classified table of all the diseases peculiar to the specialty, which I have observed and treated during the year 1873. The table comprises a total of one thousand and eighty-seven patients, and will furnish some idea of the relative frequency of different classes of disease in our climate.

Almost every classification is open to objection; and this one, I certainly think, will not be an exception. It is arbitrary, and somewhat original; and it will be seen that I have sacrificed refinement of detail to simplicity.

The experience of every practitioner inculcates original ideas to a greater or less extent, and this is my excuse for offering the clinical observations which follow these tables, not so much for the purpose of adding anything to the literature on the subject, as for the purpose of showing how I have filled up for myself some of the lacunæ or gaps left in my own mind by former teachings.

DISEASES OF THE LIDS.

Blepharitis Marginalis.....	47
Chalazion.....	21

DISEASES OF THE LIDS—*Continued.*

Lupus of the Lids.....	4
Entropium.....	4
Symblepharon.....	2
Ectropium.....	2
Pressure exerted by the Lids upon the Ocular Globe, requiring enlargement at the External Canthus.....	2
Blepharospasm.....	1
Deformed Lid from burn (auto-plastic operation).....	1
Crab Lice (<i>Pediculi Pubes</i>) infecting the Ciliae.....	1
Total.....	85

DISEASES OF THE CONJUNCTIVA.

Chronic Catarrhal Conjunctivitis.....	97
Trachoma (Granulations).....	95
Phlyctenular Conjunctivitis.....	36
Acute Catarrhal Conjunctivitis.....	31
Gonorrhoeal Ophthalmia.....	9
Ophthalmia Neonatorum.....	8
Pterygion.....	7
Tumors (Pinguecula).....	3
Echymosis of Conjunctiva from violent vomiting.....	2
Parasites in the Conjunctiva.....	1
Total.....	289

DISEASES OF THE CORNEA.

Ulcerative Keratitis.....	74
Wounds, producing Traumatic Keratitis.....	34
Parenchymatous Keratitis.....	17
Leucoma.....	15
Hypopion Keratitis.....	10
Pannus of the Cornea from Trachoma.....	3
Staphyloma	2
Kerato-globus.....	2
Herpes Zoster.....	1
Total.....	161

DISEASES OF THE SCLEROTIC.

Wounds, including Iris and Ciliary Body, and requiring Enucleation.....	31
Other Simpler Wounds of Sclerotic.....	3
Episcleritis.....	2
Total.....	36

DISEASES OF THE IRIS AND CHOROID.

Specific Iritis (Acute).....	41
Specific Iritis (Chronic).....	
Synechia (Partial).....	6

DISEASES OF THE IRIS AND CHOROID—*Continued.*

Synechia more or less complete, with recurrent Inflammatory Action, requiring Iridectomy.....	13
Foreign Bodies in the Iris.....	3
Mydriasis.....	3
Idiopathic Iritis.....	2
Traumatic Iridodialysis.....	2
Glaucoma Simplex.....	9
Glaucoma Chronic.....	7
Glaucoma Acute.....	3
Sympathetic Ophthalmia.....	3
Sclerotico-choroiditis and Anterior Staphyloma of the Sclerotic.....	2
Malignant Disease of the Choroid.....	2
Circumscribed Choroiditis.....	2
Myosis.....	1
Total.....	99

DISEASES OF THE RETINA AND OPTIC NERVE.

Neuroretinitis.....	15
Amaurosis from Alcohol and Tobacco.....	15
Simple Atrophy.....	13
Asthenopia.....	10
Retinitis (Simple or Idiopathic).....	5
Amblyopia.....	4
Syphilitic R. (Pigmentosa).....	4
Hæmorrhagic Retinitis.....	4
Detachment of the Retina.....	3
Glioma of the Retina.....	1
Embolia of Retinal Vessels (?).....	1
Total.....	75

DISEASES OF THE CRYSTALLINE LENS.

Senile Cataract.....	24
Soft or White Cataract.....	21
Glaucomatous Cataract.....	1
Traumatic Cataract.....	8
Congenital Cataract.....	1
Luxation of the Lens.....	2
Total.....	57

DISEASES OF THE MUSCLES AND NERVES OF THE ORBIT.

Strabismus Convergens.....	33
Strabismus Divergens.....	6
Paralysis, 6th pair.....	2
Paralysis, 4th pair.....	1
Paralysis, 3d pair.....	1
Ptoxis.....	1

DISEASES OF THE MUSCLES AND NERVES OF THE ORBIT—*Continued.*

Nystagmus.....	1
Blepharospasm.....	1
Total..	46

ANOMALIES OF REFRACTION.

Hypermetropia.....	40
Myopia.....	10
Astigmatism.....	6
Presbyopia.....	5
Total.....	61

DISEASES OF THE LACHRYMAL APPARATUS.

Dacrocystitis.....	20
Dacryocystoblennorrhœa.....	8
Total.....	28

OPERATIONS.

Cataract (including 2 failures).....	55
Strabismus Convergens, 33.....Divergens, 6.....	39
Enucleations.....	34
Iridectomy for Glaucoma, 19.....Synechia, 13.....	32
Dacrocystitis.....	28
Chalazion.....	21
Tattooing Cornea for Leucoma.....	15
Pterygion.....	7
Cancerous Tumor of Globe or Orbit.....	6
Lupus of Lid.....	4
Entropium.....	4
Ectropium.....	2
Fatty Tumor of the Conjunctiva over the sclerotic.....	2
Kerato-globus.....	2
Symblepharon.....	2
Staphyloma.....	2
Enlarging External Canthus.....	2
Auto-plastic operation for Deformed Lid.....	1
Total.....	258

RECAPITULATION.

Diseases of the Eyelids.....	85
Diseases of the Conjunctiva.....	289
Diseases of the Cornea.....	161
Diseases of the Sclerotic.....	36
Diseases of the Iris and Choroid.....	99
Diseases of the Retina and Optic Nerve.....	75
Diseases of the Crystalline Lens.....	57
Diseases of the Muscles and Nerves.....	46

RECAPITULATION—*Continued.*

Diseases of the Lachrymal Apparatus.....	28
Anomalies of Refraction.....	61
Total.....	967
Diseases of the Ear.....	120
Total No. of Patients.....	1087

It will be seen that under the head "Diseases of the Lids," diseases of the mucous membrane are excluded, since the conjunctiva may be considered an organ by itself belonging to the ocular globe as much as to the lids.

In regard to the treatment of *Blepharitis Marginalis*, I have been in the habit of employing a method of practice with invariable success, which, however, I have never seen recommended by any writer treating of this disease.

My first step is to pull out, with the ciliary forceps, all the eyelashes, and then to treat the inflamed border of the lid with a strong solution of nitrate of silver.

This with the subsequent application of warm compresses seems to unload the engorged blood vessels, and the unsightly, and, too often, very persistent inflammation, seems to disappear as if by magic.

Attention to cleanliness and the occasional application of a mild mercurial ointment for a few days is generally sufficient to cause all traces of the difficulty to disappear, and the eyelashes reappear strong and thick after about twenty days.

The effect of this treatment has often been so striking that ladies having a rather sparse supply of the "long silken appendages" have applied to have them all pulled out, imagining that the new crop would supply the deficiency and thus amply repay them for the pain and annoyance of the operation.

This practice was first suggested to me while at Heidelberg. A certain Professor Roeder who had a private *clinique* in that place, and who had kindly allowed to me peculiar advantages as a student, received as a patient an old gentleman who had traveled in Mexico, and who spoke of the fact that he had often seen the old women pull out the lashes for children suffering with inflamed lids. Upon this hint the treatment of a very aggravated case was conducted with a decidedly gratifying result.

In order to test the fact as to whether the ciliæ would inva-

riably return, I extracted eight successive crops from the lids of a young girl æt. 14, and although the repeated mutilation did seem to slightly thin the ranks during the last few experiments, still the unconscious victim of my curiosity presented a very good appearance when she was finally discharged. I will remark that there was no possible doubt as to the character of the parasite in the case mentioned last in this department, viz: *Pediculi Pubes* or crab lice in the cilæ.

Their character when examined with the low powers of the microscope was unmistakable, but the most singular fact in the case was, that none of these insects were found either in the eyebrows, hair of the axilla, or pubis, and the patient was a lady of undoubted respectability and apparent cleanliness. The query as to how they got there, I could not pretend to answer.

In regard to diseases of the conjunctiva, there is little to offer. It will be observed, however, that although the entire number of diseases in this department is greater than any other in the table, still the comparative number of cases of Acute and Chronic Conjunctivitis is small, and the number of cases of true Trachoma, or Granulations, is remarkably so.

This fact, I think, is due to the climate, as is also the promptness in the effect of well-directed treatment. I must acknowledge the great assistance derived from the correct and clearly stated principles of Dr. Friedr. Hesch, of Basel, in regard to Cauterization of the *Cul-de-sac* in cases of Phlyctenular Conjunctivitis, or Keratitis, when the blood vessels of this portion of the conjunctiva are at all engorged.

I have had no success whatever in attempting to remove Pterygion by means of astringent or caustic applications, but during the year I have made seven operations by transplanting, so to speak, the abnormal growth, either above or below the cornea, and, so far, have seen no recurrence in any single case.

In regard to the new process of tatooing the cornea in order to cause the disappearance of leucoma, instead of the single grooved needle described by German authors, I have made an instrument by binding together enough of the finest cambric needles to form a cylindrical brush, having about the diameter of the ordinary pupil, and by filling the interstices of the brush with the coloring material, as well as applying it to the surface

of the leucoma. I found little difficulty in impregnating the white corneal scar with the pigment by sinking the needles once or twice in the cornea.

I have had the good fortune to observe one case of herpes zoster affecting the cutaneous branches of the fifth pair of the right side, and also the smaller branches distributed in Bowman's membrane.

The pustules were well marked on the cornea as well as on the face, no one passing the median line. The case was under observation about six weeks, and the gentleman was kind enough to allow me to have a photograph taken while the pustules were in process of cicatrization, in which the characteristics of the disease are very distinct.

The patient was aged thirty-four years, and was of full habit, and up to the time of the attack had enjoyed rather robust health. He was considerably astonished at the sudden and peculiar neuralgia which bothered him, and persisted, in spite of all the anodynes which were ordered for him, until the disease invaded the cornea, when I was fortunate enough to be permitted to see it. The general treatment was conducted by means of the tonics—iron, quinine, and strychnia. As a local application, a powder of equal parts (in bulk) of quinine and calomel was lightly dusted over the cornea; a few applications of the constant current (Stœhrer's Battery) seemed materially to lessen the pain and photophobia without, however, producing any very well marked permanent effect, but may have been, I think, instrumental in hastening the recovery.

The large number (thirty-four) of enucleations practiced during the year will be remarked. Almost the entire number were the result of injuries received in the mines, explosions, and other accidents.

In a "*complete rendu*" of a clinical practice of more than two years, comprising over two thousand patients at Geneva, only two such cases are reported, showing an immense difference, which is not so remarkable when we consider the obvious cause, viz: the reckless disregard of danger which seems to characterize the California miner. After an experience, quite large, comparatively, I cannot but confirm the general rule, that when wounds affecting the ciliary body and causing permanent loss of vision occur, the affected eye should be removed as quickly

as possible, as this course is the only means in our power of preventing sympathetic ophthalmia with its concomitant total blindness.

In approaching diseases of the deeper parts of the ocular globe, the field of observation is so large in which we have for guidance such a quantity of literature, while at the same time there is so much undiscovered country, that I shall not attempt to establish any of my convictions by argument, but wish only to give some results of experience in regard to surgical interference in the treatment of cataract and other diseases affecting these portions. I cannot, for example, take the time necessary to give my reasons why I believe the artificial leech of Heurte-loup is infinitely preferable to the natural leech, or why it is that the leech should be used invariably, or almost so, in all acute diseases of the deeper membranes of the eye.

The great value of atropia cannot be overestimated in the treatment of all inflammations of the iris or cornea, whatever be the cause.

In iritis the instillations should be repeated at short intervals, (viz : every ten minutes) until the most complete dilatation of the pupil possible is obtained, and this is also the case in cases of Keratitis, accompanied by intense photophobia and lachrymation, when the most complete relief may often be obtained in one hour ; but there is still a tendency to make a panacea of the drug for all eye troubles, and its use may be carried to a hurtful extent, and is overestimated in operations on the eye unaccompanied by inflammatory conditions. It should never be used in cases of conjunctivitis, however severe they may be, unless this inflammation is accompanied by phlyctenulæ encroaching upon the cornea.

Even in practising artificial pupil, or making iridectomy, preparatory to the extraction of cataract, I cannot recognize its utility ; I can even say that some of my most successful operations for cataract have not been accompanied by the administration of a single drop of atropine solution.

Therefore, while it is the great sheet-anchor of our practice, whenever synechia exist, or are to be feared, or wherever the nutrition of the cornea is in jeopardy ; still in all other cases, surgical or otherwise, its administration may be hurtful, and should be employed with hesitation.

In calling your attention to a few convictions which have been forced upon me by my experience in operations, although somewhat limited, I must first refer to the employment of chloroform. A great many rules have been laid down by different operators, and one is embarrassed by the fact that they are as numerous as their authors, notwithstanding the high authority of the instructors chosen.

This is not singular, however, when we consider the fact that the relation which the operator bears to the patient is peculiar in its closeness, and may be likened somewhat to that existing between the teacher or governor of a school and his pupils. Every teacher makes his own rules, to which he fancies his scholars only are amenable, and they are all faulty, even in their existence, because the rules which a teacher makes should be for his own self-government, and through this faculty alone he is able to govern his school. Thus, when the operator is able to impress his patient with the fact that the degree of his own earnestness is fully equal to the magnitude of the result at stake, then this pain becomes a secondary consideration, and the patient is the surgeon's very best assistant. I will even venture the assertion that chloroform would only be necessary or desirable in the cases of very young children or idiots.

Besides the fact that the existence of chloroform in the blood is anything but advantageous, the moral effect of an operation brought to a successful issue, "well over," is, in my opinion, a decided aid to the healing process, as well as a great consolation to the patient. After the cataract operation, for instance, made with the aid of chloroform, the patient, if he has been fortunate enough to escape a spell of vomiting, filthy to himself and alarming to both friends and surgeon; wakes up with a bandage over his eyes, perfectly in the dark as to the result of the operation—the intensely depressing effect of the chloroform falling over him like a pall—made heavier and blacker by the uncertainty he feels during the weary, anxious hours he must wait until the question is decided by his own senses, which alone he is apt to trust, in spite of the assurance of his attendants. Compare with this the peaceful, contented rest of the old man, who, having undergone a successful operation upon a blind and useless eye, has not only seen and felt the sunlight, but has, perhaps,

even recognized the kind face of a friend, bent over him just before the bandage was placed in position ; his quietly expressed and heartfelt exclamation of "*thank Heaven!*" furnishing both to himself and to the surgeon a quiet night's repose.

My rule has been never to use anæsthetics when I could possibly avoid it ; whether this rule should be adopted by others or not, must be decided by each individual for himself, and will probably depend as much upon his own self-confidence as upon any other consideration.

I cannot take the space necessary to discuss the questions pertaining to the operation for the artificial pupil or iridectomy. The indications for its employment as well as the manner of its performance are well determined and generally understood. There is a growing tendency on the part of ophthalmic surgeons to use Græfe's cataract knife in the operation of iridectomy, to the exclusion of the lance-shaped knife, but while the incision by transfixion has its very obvious advantages in cases of synechia, either anterior or posterior, still the shape of the bones of the orbit and face, as well as the portion or position of the iris, (internal or external), where it may be necessary to practice the operation, may force the surgeon to use the lance-shaped knife, and when properly maneuvered there is really no advantage which that of Græfe's possesses in this operation, that may not be obtained by the former instrument. There is no necessity here to refer to the antiquity of the cataract operation. The dates have been given repeatedly in the works of every surgeon who can claim attention, but the different operative measures which have been employed during the past fifteen or twenty years furnish the steps by which the method has attained its present degree of perfection, and show the invariable line of thought and discovery, which is only a perfect repetition of the history of the operation from the remotest period.

The depression method (the first step in the treatment of cataract) seems to have been stumbled upon by accident, for it was practiced even before the anatomy of the eye was understood, or the existence and functions of the crystalline lens was known.

Curiously enough as to the question of depression, a friend, Mr. Dalton Dorr, who had accompanied Captain Hall on his expedition toward the North Pole, stated to me that while among the natives of the frozen regions he found that the old women

professed to cure cataract by a secret process, which they pretended had a supernatural source, and upon close investigation he discovered (as he said in explaining it to me) that they made a sort of a needle of fish bone, long and very sharp-pointed, which they thrust into the center of the globe of the eye, and that the wound produced an inflammation which often resulted in a cure.

The gentleman was not a physician, and knew nothing about Ophthalmology, and mentioned it to me for the purpose of asking whether I could explain the process; I, of course, instantly recognized the crudest form of depression, and, on expressing considerable interest in the statement, he promised to send to me a couple of the needles which he had brought with him as curiosities; I regret that I have not yet received them.

It would be interesting to know whether the idea was brought to these remote regions by some of the old settlers of Greenland, who, it is thought, landed on that shore over two hundred years ago, or whether it is the invention of some fertile native brain to relieve some of the sufferers from cataract, who seem to be exceedingly numerous in that rigorous climate. I have no intention to follow the successive steps in the treatment of cataract by which the present improvements have been made.

The names of Beer, Jacobson, Græfe, and others, are familiar to you. Græfe's operation has been the most universally adopted, and has thus far furnished the best general results. The distinctive points of his method are the incision and iridectomy. And with exactly these two points, ophthalmologists have been lately quarreling. As to the incision, because its nearness to the ciliary body has made subsequent difficulties with this body, and the choroid, with all the horrors of sympathetic ophthalmia, alarmingly frequent, besides somewhat favoring the expulsion of vitreous humor. The iridectomy deforms the eye, displaces the visual line, and by exposing a greater surface of the cornea, increases the astigmatism of the eye so that *perfect vision*, or rather perfect restoration of the former visual power, is extremely rare after this operation.

A number of operators have attempted to modify it so as to obviate the difficulties and dangers referred to.

Liebreich, of London, has probably succeeded better in this than any who have reported the results of their efforts up to the present time.

About eighteen months ago I had a case of Glaucoma under my care, for which I made the regular iridectomy, to relieve him of the painful and dangerous disease. Some six months afterward, cataract became developed in both eyes; as the iridectomy had been made so as to include a large section of the iris, I thought I would avoid a possible evacuation of the vitreous humor, (which I had reason to believe might be fluid in its consistency), by making my incision entirely in the cornea with Græfe's knife. I accordingly did so, in simply transfixing the cornea, by causing the knife to pass along its transverse diameter, and in completing the incision so that its summit or middle point was almost a millimetre above its (the cornea's) physical center. I was astonished to see that the lens immediately engaged itself in the wound without incision of the capsule, and by very little maneuvering its extraction, with its capsule, was accomplished. I attributed its easy exit, however, to the former iridectomy, but subsequent experience proves to my satisfaction that the expulsion of the lens in its capsule through such an incision is not only possible but exceedingly easy, without any mutilation of the iris being necessary. Shortly after I began to operate in this manner, I saw a short notice of Liebreich's new method, and not exactly understanding it in detail, the notice being without diagrams, I supposed that he had anticipated me in what I had considered a discovery. But a reference to the two cuts herewith will show immediately how the incisions differ, besides the fact that M. Liebreich often finds it necessary to make an iridectomy, in order to disentangle, so to speak, the lens from beneath the iris.

Fig. 1.

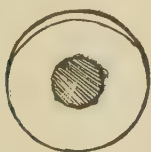


Fig. 2.



Figure 1 represents the line of incision in M. Liebreich's method. From this it is quite apparent that the lens, if at all firm in consistency, would have a tendency to push the iris before it into the wound, when the extraction is attempted without iridectomy; and that through such an incision it would be

almost impossible to extract the lens in its capsule, unless a section of the iris had been previously made; also that through such a wound it would be quite difficult even to make a perfect iridectomy; the peripheral incision, such as Græfe practiced, being much better adapted to the easy introduction of the iris forceps, the use of the scissors, and also in obtaining retraction of the iris within the wound after the section had been snipped off.

By referring to Figure 2, it is as easily understood that the pressure from behind the lens, (intra ocular) united to slight external pressure with the rubber curette, or the finger, would cause the lens to tilt upon its transverse diameter, and to come directly through the center of the pupil, without exerting any force upon the peripheral portions of the iris. And now as to the healing process.

By the later studies into the minute anatomy of the cornea, it is determined that there is a complete system of transparent vessels carrying colorless material for nutrition from the conjunctival ring at the periphery of the cornea, towards its center. These vessels, for an obvious reason, are finer in the center of the membrane than in other districts. From this it is natural to suppose that when a flap is made in the cornea, even when perfect adaptation has been obtained, one side of the incision will be supplied with nutrition much more promptly than the other, for the reason that the side of the wound most remote from the base of supplies would obtain the requisite amount of nutritive fluid only by enlargement of the existing canals, or by a sort of newly established circulation by anastomosis. In M. Liebreich's incision, the central portion or summit of the wound must undergo a similar healing process, and the advantage which might be supposed to be gained by the fact that its extremities traverse the conjunctival ring, is more than counterbalanced by the irritation liable to be caused to the important and sensitive ciliary body, especially after traction upon and mutilation of the iris, when iridectomy is practiced. These disadvantages to the healing process, I believe, are all avoided by the incision, such as represented in Figure 2. I regret exceedingly that I can only report an experience with five cases of this method. All were perfectly successful, but I firmly believe that if the number were greater I should be able to demonstrate its value still

more perfectly. Two of the cases are now in the immediate neighborhood—one at Oakland and one in the city ; but as they were private cases, I have had a delicacy in asking either to appear before you. Not at present enjoying the privileges of a public clinic, I have not the ordinary facility of clinical demonstration ; as to the bandage, I have found it quite sufficient to place a pledget of prepared lint over the closed lids, and to fasten this down with a piece of isinglass plaster. In other cases I have felt safer in using the flannel bandage instead of the plaster. I leave the bandage in position at least three days, and cannot admit that its removal any sooner can be of any advantage whatever to either patient or surgeon. As long as the former complains of no pain we may be sure that no severe or dangerous inflammatory process has been commenced, and the best way to avoid such a difficulty is to leave the parts to nature undisturbed. The simplicity of this process should be a recommendation. There is no absolute necessity of any other instrument than the knife, which should be after the pattern of Græfe's, long and quite narrow ; the wire speculum, even, may be dispensed with. The lids may be separated, and the globe held in position with the thumb and forefinger of the left hand, while the incision is made with the knife in the right. This would constitute the first period, and the second and last step would be the *accouchement* of the cataract, by maneuvering the lids and globe in such a manner, as to cause pressure at the periphery of the cornea below, while support is furnished as far back as possible on the ocular globe, toward the upper *Cul-de-sac*, which easily accomplishes its purpose. This process is certainly possible, when the patient is under chloroform, and, in some cases, without it, but, generally, when anæsthetics are not used, the more certain way would be to use the wire speculum, and also, perhaps, the fixation forceps. The lens may also be more certainly tilted, with the aid of the rubber scoup, in the second period. As to the advantages of this plan, then, we may notice in recapitulation :

First—Its simplicity ;

Second—The almost perfect immunity from the escape of vitreous humor ;

Third—The unmutilated iris and perfect pupil ;

Fourth—The greater certainty and perfection of the healing process.

The line of the cicatrix, (generally quite small), being left above the visual line which pierces the cornea below its center and inside its transverse diameter toward the median line of the body. I should state that I have used the atropia solution both before the operation, in some cases, and after the bandage has been removed, but do not consider this a necessity. The dilatation of the pupil affords no advantage to the exit of the lens, as the pupil contracts immediately after the incision and escape of the aqueous humor.





REPORT OF THE COMMITTEE ON OBSTETRICS.

BY F. WALTON TODD, M. D., OF STOCKTON.

In the progress which science is making in every department, it would be strange if obstetrics lagged behind. The embarrassments which practitioners met with but a quarter of a century ago, alone would serve to make them eager to avail themselves of the light by which history and morbid anatomy have unveiled to them subjects and facts which seemed impenetrable to the comprehension of man. The discoveries of half a century may well make us ask what is the limit of even the finite mind? Made free, it explores the obscurest ways of nature, and traces, by a beautiful system of induction, her unvarying laws, normal and abnormal, until it can almost be said that there are no arcana in her vast and varied fields. Her hidden mysteries have become familiar as household words—indeed may be said to have become household words, under the prying inquisitiveness of the scalpel and microscope, directed by the genius of John Hunter and Andral, Virchow, and Sir James Paget.

It would, indeed, be strange if obstetrics had no triumphs to record; if the spirit of the present age had passed her by, and left no sign that there were in her ranks men of sufficient scope of mind to illuminate her obscure places by light drawn from the correlative branches of science.

A little more than two hundred years ago this branch of our profession was almost exclusively in the hands of women, who relieved their cases of protracted and obstructed labors by charms and incantations, and by the eagle-stone placed at the vulva; even at so late a day as this girdles were kept in families, as protection against the perils of childbirth, and a distinguished writer

of that day said : "It will be profitable when a woman hath had a sore travail, to wrap her back with a sheepskin, newly flayed off, and let her leg in it ; and to lay a hareskin, rubbed over with hare's blood, newly prepared, to her belly." About this time the Chamberlains introduced the forceps and vectis, and their success with these instruments went far to remove the prejudices of the times against male accoucheurs. But the real advances in the science of obstetricy have been made within the last hundred years—mostly in the last half century. There are gentlemen in this society, by no means superannuated, in whose hands were placed the systematic works of Smellie, Denman, and Burns, as the best authorities from which they could learn the principles of midwifery ; I well remember them in the library of my father, alongside of James, Duvers, Gooch, and the elder Ramsbotham ; and very good systems they were, when compared with the works of Mrs. Sharp, Mrs. Nihill, and Mrs. Stephens, which preceded them, and which were standard authorities, very little more than one hundred years ago, in England ; yet how immeasurably short they came of teaching obstetrics in the broad sense in which it is understood at this day. Velpeau says : "Obstetrics is the aggregate of knowledge relative to the reproduction of the human species. It includes the anatomy, physiology, pathology, and therapeutics, peculiar to women, together with the science of reproduction, its phenomena, and consequences, parturition, and puerperal diseases." A basis upon which has been reared a superstructure, which may well excite the pride of the votaries of this beneficent art. It has given us the classification of Baudelocques ; the popularizing of the speculum, by Recamier ; the use of the hysterotome, cranioclast, sponge tent, and sound, by that gifted Scotchman, Sir James Y. Simpson ; has taught us how safely ovariotomy may be performed ; that vesico vaginal fistula is curable ; and that sterility, in many cases, need no longer disturb domestic happiness. Great as are these achievements, and glorious their results, their benefits are few compared to the multitude of lesser miseries, which no longer are felt to be the opprobria of the practitioner, if not of the art. Women are now not blindly dosed with drugs to relieve a metrorrhagia, induced by a polypus, a fibroid, hydatids, or fungous granulation : and the volatile tincture of guaiacum, or Fenner's famous bichloride of mercury

mixture are not expected to cure a dysmenorrhea, caused by endocervicitis, version, or a narrow *os tincae*. With Barnes' dilators, we need never again resort to the knife, even in extremities, to relieve a rigid os, and by that blessed boon to sufferers, anæsthesia, we are taught to explore with unerring certainty through the rectum, the entire pelvic cavity, passing the hand, as some have done, as far as to the sigmoid flexure of the colon.

Physicians no longer turn away cases which have gone the rounds of the profession, trying the favorite prescription of this one or of that one in vain, but they confidently take desperate cases, with the expectation of being able to relieve, if they cannot cure them; and then cases need not be sent a thousand miles away to a specialist; in almost every community some one is found ready to grapple with them, and to do it successfully.

The diverse views of recent writers show to the earnest searcher after truth that, while in many things we have made giant strides; in others, very essential, the true policy is to make haste slowly. We should not discard those truths which have stood the test of time, simply because they are old, or cling to them because they have been sanctified by the thick gathering dust of years; and I desire, in this connection, to enter my dissent to the views expressed at our annual meeting in October, 1872, by a worthy member of this society, whose opinion, upon most subjects, carries great weight with me, on the use of ergot as a parturient. Under favorable conditions, I can but regard it as indispensable in a large number of cases of advanced labor, where the womb is fatigued, or where it has been long distended by excess of the liquor amnii, or where delay from exhaustion by any cause would endanger the child's life. I most emphatically dissent from the statement that it is ever the cause of death in the child, but would maintain that that event is more properly to be ascribed to the delay of the head in *vias naturales*, and that most of these children would be saved by ergot or the forceps, which, I confess, is too seldom used; the former of which we may, and should always have, with us, whilst a fatal delay to the child may take place before the latter can be procured. A very free use of ergot justifies me in saying that in many cases, we have the same pauses between pains as in unaided labor.

There is a subject, which is at present exciting a lively controversy among the ablest gynecologists of the day, which has a practical bearing of great weight. It is claimed by Dr. J. Henry Bennett and others that the different flexions and versions of the uterus depend upon the weight of that organ, induced, in most part, by inflammation and its consequences; and that, instead of endeavoring to cure these lesions by pessaries, the proper method is to address such remedies as each particular case may demand, for the reduction of the volume and weight of that viscus, with the certainty that it will then right itself, or, at most, be more easily restored and retained in situ, by some simple appliance. Other equally distinguished gentlemen, and among them, Mr. Graily Hewitt, while not denying the pathology, claim that the uterus will not resume its normal relations to the other pelvic organs without the aid of mechanical support, although the inflammation or hypertrophy, as the case may be, has been cured. I am fully convinced, and wish to add my testimony to, the justice of the claim of those who maintain the affirmative of this proposition. For several years, I have treated these cases, almost solely, by local depletion, caustics, absorbents, and demulcent injections, with great satisfaction to my patients as well as myself, and I have found, except in extreme cases of flexion, causing dysmenorrhea and demanding hysterotomy, that what remained of these malpositions, produced no discomfort or demanded mechanical interference after such treatment.

The journals, for the last year or two, have carried on quite an animated discussion upon the merits of quinine as an oxytoxic. Some parties deny that it exerts any power over the gravid uterus, and base their arguments upon the fact that it does not inaugurate labor when freely given to pregnant women suffering from diseases which demand its employment. I am of those who believe that there are conditions wherein its use may be eminently beneficial, and in more than one case I believe that I have found it so, where opium failed to quiet or increase inefficient pains in the first stage, and when, because of the undilated os, ergot or the forceps were inadmissible, and where a toning up of the general system was demanded, before the time had come for a specific parturient. In one case wherein I used it the labor had continued many hours, the membranes broken, the

os very slightly opened, and a good deal of exhaustion existed ; a few small doses of quinine very soon increased the force of the contractions, and placed the patient—a multipara—where ergot speedily terminated the labor. It can never take the place of the latter drug, but may very properly be regarded its *avant courier*.

I regret that since my supplementary report to this society, eighteen months since, so few cases have come under my observation, and that none have been sent to me by my associates on this committee, the report of which would interest the members ; I will, however, relate a case cognate to the subject in hand—the only one of the kind I ever saw.

The child of N. A., three weeks old, presented, on the right parietal bone, at its posterior superior angle, a well marked cephalæmatomata. It was circumscribed by the characteristic bony ring, with a parchment-like, crackling feel, was soft and fluctuating. The child was healthy and growing. The tumor was perceived by the parents immediately after birth ; it had not grown ; was not discolored, nor tender to touch ; had no pulsation, nor symptom of intercranial disease ; and the exploring trocar brought a dark menstuous-like blood. I made a valvular opening into it with a bistoury, and obtained a considerable quantity of dark fluid blood. A compress was applied and kept wet with a lotion of muriate of ammonia, acetic acid, and water. In ten days the discharge became purulent, and continued so six weeks ; when it subsided the child was well.

I reported to this society on a former occasion, a case of amputation of the cervix uteri, for schirrus, of a lady two months advanced in pregnancy. In July, last, I was called to see her niece, a girl of eighteen, in whose breast was a hard lobulated tumor, which was making a rapid growth. After some futile attempts to discuss, I removed it, and sent it to Professor Gibbons, who has since informed me that he considered it a schirrus. The wound was brought together with silver sutures, and dressed with carbolized oil on lint, thickly covered with cotton batting, bandaged, and left undisturbed for eleven days ; upon removing the dressings complete union had taken place, except where the sutures were, and after their removal nothing more was required. I report the case on account of the successful use of the dressings now employed by Mons. Alphonse Guérin,

of Paris, and as another instance how favorable our climate is for surgical operations. A case of puerperal convulsions, the history of which has been detailed to me by Dr. L. Robinson, of Colusa, furnishes some points of unusual occurrence, and hence of interest. A young primapara at full term, with a patulous os, undilated, and with no pain, went into convulsions. After forcible dilation, version and a safe delivery were effected, with the loss of quite a considerable amount of blood. Chloroform and chloral were freely used before and after the delivery, but still the convulsions went on. Venesection was not resorted to, for the reason that it was thought unadvisable after the loss of so much blood, until twenty-four hours after the child was born, when, after a free blood-letting, the convulsions subsided, and mother and child both did well. The doctor *naively* remarked that he had a dislocation of a child's ankle to reduce after he got through.





SUPPLEMENTAL REPORT ON OBSTETRICS.

BY CLINTON CUSHING, M. D., OF OAKLAND.

ON THE MANAGEMENT OF ABORTION.

There are some points in the management of abortion to which I desire to call the attention of the members of the society. The importance of understanding the best method of managing these cases, is made evident by the fact that all, or nearly all, writers on diseases of women place abortion among the most frequent causes of uterine diseases.

Some portion of the practice that I have pursued has been original with me, and the methods which I shall detail have been followed by such satisfactory results that I deem them of sufficient value to justify my carrying them before you. In regard to the management of a case of merely threatened miscarriage, I have nothing new to offer in addition to the course advised in the text books, namely: *First*—perfect rest and quiet in the horizontal posture; *Second*—opium in sufficient quantity to control the contractile efforts of the uterus, allay nervous excitement, and equalize the circulation. Farther than this, I know of no treatment which promises much good in a case of threatened abortion, as far as the prevention of the accident is concerned, although other remedies are recommended.

An important question now arises, and it is this: at what stage of a threatened abortion should any interference, further than that above mentioned, be undertaken? In reply, I should say that interference is demanded the moment there is sufficient uterine hemorrhage to materially affect the pulse or strength of the patient; and never to allow an excessive loss of blood when you have charge of the case from the commencement. When

it becomes evident that the contents of the womb will certainly be expelled, the course usually advised is to administer ergot in full doses ; give acidulated and cold drinks ; introduce ice or ice water into rectum or vagina ; and if necessary introduce a tampon into the vagina, to control the hemorrhage, until the neck of the uterus becomes sufficiently dilated to allow its contents to be expelled. Now, where the hemorrhage is profuse—and these cases are about the only ones in which interference is required—ergot does but little or no good before third month in producing contraction or controlling hemorrhage, from the fact that the muscular structure of the uterus is but slightly developed before that time.

Astringent medicines and cooling drinks have rendered me but little service in controlling the loss of blood. The free use of ice and ice water in the vagina and rectum are followed by better results, as far as checking the bleeding is concerned, but ice is not always attainable, especially in country practice. The vaginal tampon, which consists of a number of pledgets of cotton wool or of pieces of old linen packed into the vagina sufficiently tight to prevent the escape of blood, is probably the most certain to control the loss of blood of any of the methods yet mentioned. The objections to the tampon are that, unless the packing is placed in position skillfully, the hemorrhage will still ooze out around the tampon ; if the packing is placed too tightly, the distended vagina becomes exceedingly painful in a short time, necessitating its removal. In those cases where the hemorrhage is severe enough to demand treatment, my method of procedure is as follows : I place the woman on her left side, and after the usual digital examination to determine the condition and position of the uterus, I introduce Nott's modification of Sim's speculum, and, by means of cotton wool and Sim's uterine dressing forceps, remove all the blood and clots from the vagina, so as to bring the os uteri into view. If the os is dilated and the ovum presents, it can be removed with the forceps, if sufficiently loosened from its attachments to the sides of the uterus, and, if bleeding still continues after its removal, take a piece of soft sponge in the dressing forceps, dip the sponge into Monsel's solution of the persulphate of iron, and wipe the interior of the uterus over freely until bleeding ceases.

If the os is not sufficiently dilated to allow the expulsion of the contents of the womb, seize the anterior lip with a *ténaculum* forceps, and introduce a sponge tent as large as can be introduced without much force; then place against the sponge tent a pledget of cotton-wool, to which has been attached a piece of strong thread to assist in its removal when desired.

The sponge tent should be left in situ for twelve or fourteen hours, and upon its removal if the ovum is loosened from its attachments it is soon expelled; or it can be removed if deemed best. If, however, after the removal of the tent the ovum should prove to be adherent, and the hemorrhage should be troublesome, introduce a second tent of large size, and allow it to remain as before; but I have noticed that after the neck of the uterus is well dilated that the hemorrhage ceases, whether the ovum is expelled or not. Upon the removal of the second sponge the os is so thoroughly dilated as to allow the introduction of the finger, or an instrument, if necessary.

The advantage to be derived from the use of the tents are: *First*—a very certain and easy method of controlling the loss of blood; *Second*—the dilatation of the uterine neck with but little or no pain, for opium is always in order after the introduction of the sponge, being administered in sufficient quantity to insure quiet.

I presume there is no physician who has practiced medicine for many years, or has had any considerable number of cases of abortion to treat, but what will remember instances where he has been detained for hours in waiting upon a woman, hoping that the dilatation of the neck would soon take place, and contents of the uterus be expelled, thus putting an end to the hemorrhage, and to his anxiety; in the meantime he being detained away from his other business engagements, or, perhaps, kept up the entire night in attendance upon the case.

When the sponge tent is made use of after its introduction, the physician can leave his patient for ten or twelve hours with the certainty that he will not be needed in the interim; instead of being sent for from hour to hour, as is common in a troublesome case of abortion.

Thus far I have seen no ill result following this plan of treatment, but the recovery is usually rapid, owing to the prevention of any excessive loss of blood.

The woman should have the same care, and use the same precautions as in a case of delivery at full term.

In regard to the use of the persulphate of iron to the interior of the uterus, I would say that I have used it freely in this manner in quite a large number of instances to control hemorrhage, and no ill effects have followed as yet. I have never seen the iron used in this way produce any severe pain in the uterus. I always apply it with a soft sponge held in the dressing forceps.





REPORT ON PUBLIC HYGIENE AND STATE MEDICINE.

BY THOS. M. LOGAN, M. D., PERMANENT SECRETARY STATE
BOARD OF HEALTH.

MR. PRESIDENT AND GENTLEMEN: As Chairman of the Committee on "Public Hygiene and State Medicine," I would take occasion, while presenting a partial report, (the other members having failed to respond), to express my gratification that I am permitted to address you from the same official position in the State which has been held by me for the last four years. Notwithstanding the parsimonious spirit which dominated in our legislative halls, just closed, and which has denied the moderate bounty hitherto granted to the important branch of medico-political science sustained by this society, our State Board of Health has escaped the subversive assaults of the so-called reformers. The doom of abolishment, with which it was threatened at the opening of the session, was the means of drawing public attention to its objects, the range of its operations, and the mode and measure of its benefits—a result, than which nothing could have more effectually subverted its interests. The popular feeling manifested toward the Board was fully in keeping with the general favor with which the subject of public hygiene is now regarded, and, thanks to the intelligent scrutiny to which it was subjected, the State Board of Health has become more firmly established than ever before in the confidence and good-will of the sovereign people.

Hitherto, the field of sanitary labor has been so much out of sight, so far removed from common observation, that the kind and amount of service it has performed, and the real value of its work, have been known but to few in the profession, and to

still fewer, comparatively, in the other walks of life. Probably, not one of those legislators who were so ready to wipe out of existence at "one fell swoop" the State Board of Health, had ever taken the trouble to read its biennial reports, or even that portion of the last one, which indicates the character and scope of its investigations. Now, if this conjecture is sustained by fact, it could not have resulted otherwise than to have detracted from the intelligent action of our law-makers, and to have reflected disparagingly upon the status of the State among enlightened communities.

Every two years the members of our Legislature are brought face to face with the most vital social problems. They are called upon to make large appropriations for the treatment of the insane ; for the care of the sick and suffering in hospitals, alms houses, and prisons ; for the maintenance of asylums for the deaf, dumb, and blind ; and for many eleemosynary and correctional institutions, as well as for quarantines and other sanitary provisions. Abroad, no subjects within the sphere of legislation, are being investigated with more earnestness and ability than these State institutions and charities. At the meeting of the Social Science Association, of Great Britain, held at Norwich, in October, last, the management of prisons and reformatories was a topic of debate, second only in the interest it attracted, to that of education—now the dominant theme in that country. The best method of diminishing pauperism, with its attendant sickness and other evils in its train, is, in our Eastern States, and in many other countries, the subject of active and intelligent discussion. France has a commission for the improvement of her prison system. The movement for reform and industrial schools for juvenile delinquents and children without proper parental custody, was never perhaps so great as now. In interest in most of such questions as these our State lags far in the rear of other civilized countries, and in certain respects is behind them all.

And in relation to our State Board of Health, no one, I presume, will attempt to gainsay the assertion that on no subject did our Legislature evince their disregard of the great social questions of the day so glaringly, as when they broached its abolishment.

How few of them could have realized the fact that the results of its most successful labors appear only in lives saved and sickness prevented among the lowly and unknown, and that the sickness, which creates the ceaseless drafts upon the public funds, is most prevalent, constant, and fatal among the abject, poverty-stricken, and helpless. This ever-present sickness is, with the consequent impaired health, the origin of a feeble population and of more misery, poverty, mental and physical suffering, degradation, and crime, than any other cause. It is this that disables the laborer, both in person and family; that reduces the productive capacity of individuals and communities; that affects the success of business and trades; that demoralizes, and increases the temptations to shiftless idleness, drunkenness, disorder, and crime; that fills to repletion our prisons, our asylums, our hospitals, as fast as we can build them, and that demands constantly and increasingly the dole of public charity.

Now, to adopt the argument of a newly affiliated Board of Health—that of the State of Minnesota—it is possible to prove that an active and properly organized Health Board can prevent all these dire effects. It can diminish the average sick-rate as much as one fourth, and the average death-rate probably one fifth in amount, among the very poor, living in crowded tenement houses, and unable to choose or regulate their sanitary surroundings. It can do even more than this; it can reduce the infant mortality to even less than it now is in California—about one third of the total—and in so doing increase the health and vigor of offspring, and diminish the number of infirm imbeciles, who are adding largely to the charitable outlays of the State.

“The work of sanitary reform is the most practical and beneficial which the science of the country has produced. The expense which it involves will not equal the expense which its neglect occasions. It may be paid out of the public and private funds which now go to the temporary relief of poverty; for the cure of constantly recurring sickness; for the support of poor houses; the conviction and punishment of criminals; the care of feeble poor; and the burial of pauper dead. It diminishes taxes by substituting prevention for cure; it deals with causes themselves—not with their effects alone; it vindi-

cates the truth of Franklin's adage 'Public health is public wealth.' "

But it is not with our Legislature only that such willful ignorance obtains, both as regards the benefits involved in a comprehensive administration of Health Boards, and, on the other hand, the evils resulting from the neglect of sanitary provisions. The deplorable ignorance now referred to prevails throughout the length and breadth of the State, among all castes of society, and, I am sorry to say, even among the ranks of our profession. Strange as it may seem, moreover, we find people who are well posted in the literature and popular science of the day—men of a certain degree of culture, but not of that kind which involves the idea of duty—of thought for our fellow-men ; we find these people maintaining that the emanations of the cesspool cannot be prejudicial to health, because their fathers lived and thrived in houses with wells and privy-vaults in close proximity ; and worse than this, we find the local physicians too often tacitly acquiescing in such absurdities, or, at least, making no effort to counteract their consequences. Had there been a tithe of the instruction, which should have prevailed, of that vigilant knowledge which Boards of Health are dinning continually into unwilling ears, would we ever have heard of that terribly malignant form of cerebro-spinal meningitis, which, appearing first toward the latter part of February, 1873, at Deer Creek, near Vina Station, Tehama County, and manifesting itself afterward at Auburn and Georgetown, desolated whole families ?

During the rainy season of 1868-1869, the whole Pacific coast was afflicted with one of the most readily preventable of all the diseases to which humanity is subject. Had the popular prejudice against the resort to revaccination been timely met and overcome, I confidently think that small pox would not only never have assumed the epidemic form, but would never have found an entrance into our State. Do we need further instances of the certain but logical penalty of the violation of sanitary laws ? We have them in the history of the terrible epidemics which have scourged the people of Shreveport, Memphis, and Buenos Ayres. Shreveport has been described as the receptacle of all kinds of nuisances. Her streets

were sodden with filth, and the suburbs were packed with festering vegetable and animal garbage, for which there was no outlet. The air became poisoned with noxious emanations, and every breath inhaled so tainted the blood that nothing was wanting to develop yellow fever into the fearful epidemic it became, but the germ supplied from New Orleans. Once planted, it had to run its course, and the citizens, in the utter impotency of medicine to cope with its malignity, had to wait and trust to the frosts of Winter for its extermination.

Memphis had hardly any sanitary advantage over Shreveport. Situated on a high bank of the Mississippi, with proper drainage and a decent system of sewerage, it ought to be one of the healthiest cities on this great river. But there is no such system of sewerage—in fact no drainage at all. Hence it hardly required inoculation from abroad to start the epidemic. Had there been no yellow fever, there would probably been something equally as fatal.

The situation of Buenos Ayres, on the estuary of the La Plata, one hundred and fifty miles from the sea, is not an unhealthy one. In fact, though on a flat, like Chicago and Sacramento, the climate has always been famed for salubrity, and the name of the city, "Good Air," is a universal advertisement in its favor. But trusting to the good air given by nature, no drainage or sewerage was attempted. Each house had its cesspool, where all the *cloacæ* have been sunk for three hundred years, and when one pit is filled up another is made by the side of it.

Two years ago the yellow fever appeared there for the first time, and nothing like its virulence and fearful mortality was ever before experienced in the history of this disease. It was more fatal, according to the population, than the great plague of London, in 1665. More recently this once famously healthy city has again become the victim of epidemic disease—this time Asiatic cholera—if possible more fatally dreadful than the yellow fever. Buenos Ayres is paying the certain penalty of a contempt for sanitary laws. The lesson of the past epidemics there and in the Mississippi Valley, was merely the value of applied sanitary science in saving cities, and of the utter helplessness of cities not so protected. The cholera has only

gone into Winter quarters, and with the approaching Summer and Autumn will almost certainly reappear, and terribly visit such places as are unprepared. Let us take warning. Go into any of our interior cities and towns, and we find that anything like a thorough or carefully thought-out or wrought-out system of sewerage is a very rare exception to a very wide spread rule. In spite of its admirable position for drainage, nothing can be more inadequate than the sewerage of our metropolis. With an ocean supply of water at command, and provided with full instructions as to the superiority of salt water over fresh, on scientific principles, and its ready applicability by Dr. Stout, of the State Board of Health, the supervisors of the people's interests are still permitting a miserable modicum of the most costly fresh water in the world to be doled out, under a pretense of sluicing the imperfectly constructed sewers. It is this false economy which fills our orphan asylums, our alms houses, and our hospitals.

The International Medical Congress, which met in Vienna last year, inaugurated a great reform respecting quarantines, but their labors have taken no such hold upon the policy of various States as they ought to have done;* the reason of which is: that while there are several admirable sanitarians in our own country and in others, still there are not enough

*In this connection, and to exhibit the general sentiment of the profession on the subject, we quote the following resolutions of this Congress; the Presidents were Dr. Abdullah Bey, of Constantinople; Dr. Tomaschich, of Trieste; Dr. Witlacil, of Vienna, and Prof. Caminha, of Rio Janeiro:

First—The practice of quarantine as now carried out ought not to be maintained, because, on the one hand, it does not constitute a real protection (*protection suffisante*) against contagious maladies; and, on the other hand, it is directly opposed to the interests of commerce and industry.

Second—Quarantine ought to be limited to the time requisite for the examination and disinfection of the ship, the crew, and the passengers, and if there be no disease on board, the latter should be released immediately after disinfection. But if there be cholera or sickness of a doubtful nature on board, it will be necessary to isolate and disinfect the ship also. The regulations in regard to yellow fever and plague should remain for the present as they are.

Third—Existing quarantine regulations should be modified in accordance with Resolution Two.

Fourth—A permanent Epidemiological Commission should be formed for the purpose of studying fundamentally and systematically all maladies arising from infection.

In the cholera epidemic, last summer, it was well shown that not the most rigid quarantine excluded the disease, but the source of failure was that a quarantine sufficiently rigid is practically impossible, and that a quarantine alone, without other and energetic sanitary measures, is and must be inefficacious—[*Philadelphia Medical and Surgical Reporter*.

of them to fill capably the appointments of our Boards of Health and to assist in creating and spreading a healthy opinion on sanitary matters. There is a great need of special and technical instruction in our medical colleges on public hygiene—hygiene in its relation to quarantines; in regard to the prevention of epidemics; in regard to sanitary provision for the wants of our cities, towns, and countries. The few local Boards of Health that are now in operation cannot, in an extended State like ours, accomplish the great work before them, and especially they cannot, in an extensive State like ours, if its members are burdened with the laborious duties of a medical practitioner. The large sums appropriated by the State for charitable and correctional purposes never can be properly economized; the great machinery for keeping her army of dependents can never be made to work beneficially—the immense moral power put forth through the various boards of trustees, inspectors, superintendents, and other officials—can never accomplish what they might do, until some central power, like the State Board of Health, shall be clothed with authority to co-ordinate the existing forces and make them work harmoniously to a common end. As at present constituted, the principal duties of the State Board are to exercise a certain degree of general supervision over all hospitals, asylums, and other charitable and correctional institutions receiving State aid; to collect and put forth statistical information respecting diseases and the effects of localities, employments, conditions and circumstances, on the public health, and to act as an advisory Board to the State in all hygienic and medical matters, especially such as relate to the location, construction, and administration of prisons, hospitals, asylums, and other public buildings, drainage of lands and sewerage of cities, quarantines, and other preventive measures against disease. Thus, although the board seems to be clad with a part of the necessary power, it is only a very small part, and of that there is more in name than in fact. But even the moral power which it might exert as an advisory board is greatly reduced by the generally feeble support it receives from the profession.

Assuming, Mr. President, from the fact of your appointment of a standing committee to report annually on public hygiene

and State medicine to this society, that its members wish the State Board of Health to be of the greatest possible benefit to the medical profession and especially to the people of the State, I will now proceed to offer some practical considerations relating to the questions that have just been raised.

Without stopping to discuss the damage done to the professional status and prestige by causes for which we are not directly responsible, candor compels us to admit that we are seriously injured by other causes, springing from the profession itself. While I felicitate myself on the historical fact that, through the instrumentality of the position in which I am placed by the State, I was enabled to take an active part in resuscitating this society in 1870, I must be permitted to say that too much of that rivalry of self-love and of interest between doctor with doctor, and school with school, which, prior to this event, consigned our association to the tomb of the capulets for more than ten years, still persists. Important as these disputes, or the questions involved in them, may seem to us, to the people they appear useless and unseemly, and the individuals who, through honest, but mistaken zeal, engage in them, belittle themselves personally and us as a profession. And more, they have either prevented or defeated all efforts to obtain legislation that would have enhanced the efficiency of the State Board of Health or more effectually protected the people against medical frauds and ignorance.

What, but the persistent opposition and indifference to every scheme and effort to elevate the status of the profession and to gain for it a place and an influence in the councils of the State, have caused the Registration Laws, which afford the only reliable indices of the pregnant facts of marriage, birth, and death to be inoperative. The statistics these laws were framed to collect indicate the necessity and direction of preventive and precautionary measures, and their influence when applied on health and disease. Now, how have some of the members of the medical profession responded to the provisions? I am sorry to say that, as a general rule, many have not only proved obstructionists, but in several instances, opponents of the law, refusing even to name the proximate cause of death on the burial certificate; nay, more: some have

openly expressed a desire that the State Board of Health, which constitutes the only medical organization recognized and sustained by the State, should be abolished. The plea that is set up in defense of such conduct is that, inasmuch as the illiterate and unrecognized members of the profession are unable to diagnose a disease, and hence are incapable of assigning the true cause of death—these mortuary certificates, therefore, can possess no scientific value, and are unworthy of attention. Now, whether they are absolutely correct or not, is not the question. We desire to inaugurate the system of registration, and, if we cannot now obtain positive facts, we hope, at least, to approximate those more perfect results, which time and familiarity with the subject will most assuredly bring about. But we never will attain this end, if those, who are best able to furnish the correct data required, stubbornly refuse to do so.

Again, it is asserted that the nominal members of the profession, who seek and obtain both money and reputation by shams and frauds and false pretenses, are so numerous, that, rather than incur the slightest risk of being identified with them, the physician of moral worth and personal dignity must decline to act in concert with any movement or scheme tolerating such parties thereto. To this I reply that, however repugnant it may be to the man of high culture, whose mind is stored with general scientific knoweledge, to place himself on the same plane with his less favored professional brother; still it must be remembered that we are all debtors to our profession, and that by making it contribute in every possible manner to the public good, we are elevating ourselves. If instead, therefore, of retiring within himself, or confining his professional intercourse to a limited circle of congenial medical friends, or to the offensive cliques, which are now so fashionable, the physician of exalted views would throw the influence of his accomplishments into the scale of social and professional progress, he would thus aid in elevating many a worthy member of the profession to an honorable position in society by removing the impediments to his usefulness. But deny these less favored members the benefits of all communion and intercourse—cut them off from that associated action—that friction, which causes mind to bear on mind, and we arouse a spirit of antagonism, which will neutral-

ize all our efforts to rescue our profession from a degrading rivalry, or to raise the *morale medicale* of our country to a level with the philosophic character belonging to our science.

Gentlemen! I cannot believe that the opposition to our best interests, involved in the utilization of the State Board of Health, proceeds so much from malevolence, as from ignorance, thoughtlessness, to say the least of it, as to the import of concerted action; and I am but giving voice to thoughts and feelings that have long been smothered—smothered, because no fitting opportunity has been hitherto afforded to take council together with you in devising some remedy for the impediments by which we are on all sides environed. It was not my purpose, however, to complain without assigning just cause, nor would I arrogantly dictate your future policy, but, delegated as your committee on an important branch of the public service, I feel that I have the right to direct your attention to what I conceive to be the radical and fundamental cause of all our present difficulties and embarrassments. I believe that the general indifference to public hygiene, and the obstructions thrown in the way of the prosecution of the objects of the State Board of Health are attributable to the same causes which have produced the manifest decline of the profession in popular estimation and influence. That these causes are mainly due to the fact that the average intellectual endowments and acquirements of medical men are relatively lower, as compared with the popular average in this respect, than they were fifty or even twenty-five years ago, is a proposition that can hardly be controverted. In other words, while during the last quarter or half century the popular average of intelligence and culture has advanced, the professional average has remained almost stationary. In answer to the question which now recurs, why have we, as a profession, lost so much more of popular prestige than the professions of the law or theology, I will quote as germane to this discussion, some of the conclusions drawn from a joint report of a committee of the State Medical Society, and of the Regents of the University of Michigan, which will present the subject from the point of view I would now take, in a more authoritative and abler manner than I can; and I trust that this general credit will be a satisfactory excuse for the free use

I have made, and will still further make, of that well matured document :

“One reason for our loss of prestige is this : The medical profession, *as a profession*, exercises no *visible control* over admissions to its ranks. While theologians admit no one to their fellowship or their functions until visibly examined and approved by themselves ; while lawyers admit no one to their ranks or their responsibilities until examined and approved by the Courts, doctors must sit still and submit to a reinforcement of their numbers by men of whose qualifications they are ignorant ; men who are forced on us and recommended to the people by *diplomas*—diplomas that mean something or that mean nothing—diplomas from good schools and bad schools—diplomas honestly earned, and diplomas bought, stolen, or forged ; indeed, such a heterogeneous mass of diplomas, so evidently signifying nothing, that it is no wonder the people receive and welcome to their confidence and support another large class of self-styled doctors, with no diplomas at all ; and we are presumed to be incompetent to pass judgment on the qualifications of our own recruits, apparently for the reason that we *do not do it*, or *do not claim the right or the ability to do it*.

“The law and the people do not recognize even the marriage certificate of a preacher, until he has been licensed by theological experts ; the law and the people do not recognize the acts of an attorney until he has been admitted to practice by legal experts ; the law and the people do not permit an engineer to run a locomotive or a steamboat, until he has been approved and licensed by experts ; but both law and people permit man and wife, plaintiff and defendant, and train-loads and boat-loads of all sorts of people to be run into untimely graves by self-styled doctors, who practice without any examination or any approval by medical experts. It is not necessary to argue, that such a difference in the legal treatment of the professions requiring technical knowledge and skill, not only depreciates the average qualifications of the profession and degrades the best members of it in popular estimation, but (which is of much more consequence,) it seriously lessens our beneficial influence in preventing and subduing disease.”

Recognizing the justness of these conclusions, and believing that to the relative depreciation, or rather, want of progression in the medical ranks, *pari passu*, with the other professions, are to be attributed the shortcomings and delinquencies which have been passed in review, I have only to propose the one remedy which logically suggests itself. It is "that adequate medical knowledge, made accessible to all, shall be required of all, of whatever school, who attempt to practice medicine or surgery as a profession."

Now it is evident that such a sweeping measure of reform as this proposition contemplates can never be put into operation without the harmonious and combined action of the profession and all the schools, for the reason that, without concert of action on the part of the profession, we could never obtain such legislation as would enforce the requirements, and, without the schools, the needed knowledge could never be furnished.

If the profession, then, represented by this society, and both the medical schools, will, as a unit, come before the bar of the law-making power and demand, on our own behalf and on behalf of the people of this State, that it provide by law some competent authority to pass upon all *new* candidates for recognition and employment who desire to practice in the various departments of a profession requiring technical knowledge and skill, we shall have inaugurated a reform which time cannot fail to perfect, as new recruits are entered into the service of medicine. As professional men we have the right, and as good citizens it is our duty to demand that the health and lives of the people shall be protected against the ignorance of the doctor employed, and the Legislature cannot refuse, so long as the demand is made irrespective of all so-called schools of medicine. When we thus invite all honorable and self-respecting representatives of all sorts of medical practice to join with us in asking the Legislature that legal guarantees be given to the people of the knowledge of all who practice a learned profession—reliable guarantees of that very knowledge, the necessity of which is admitted by every quack, who boasts of having it; we shall then, and not till then, be sustained in our demand by all intelligent and philanthropic men.

But let us look at our remedy from a scholastic as well as

from a legislative aspect. While we ask the Legislature, on the one hand, to give to the people legal guarantees that proper knowledge has been acquired by the medical practitioner, let us also, on the other hand, require of the schools, and those who have charge of the schools, to furnish every possible means whereby knowledge may be obtained in the fullest degree. The time has gone by when the very necessities of the people made them indifferent to the general culture of the doctor, so they had but an assurance that he knew something about medicine. But our seminaries and colleges, as well as the literary department of our University are co-operating in educating our youth to a degree that renders it wholly unnecessary to accept the illiterate as candidates for the medical profession, merely because medical knowledge, *per se*, is scarce.

By the enlightened liberality of our Federal and State Governments, our University is a *free* school. As the representatives of the medical profession of this State, I ask you, gentlemen, professors in our medical colleges, to take advantage of this very *freedom*, and see to it that your students are not ignorant of the rudiments of a common education, not to speak of the other branches, which are the bases of all our medical nomenclature. Every consideration that should influence us on this subject conspires to urge a higher—a much higher degree of general education of all who matriculate in the medical schools. I do not believe that such a change in the requirements of admission will seriously diminish the number of medical students. Young men of liberal education, who know how to estimate its value, will come in large numbers; the best men of our profession will cease to advise their students to go where a higher standard of attainments is required; and, above all, the character of our graduates will be so elevated, and their average rank in the profession so superior, that the laudable ambition of a better and a brighter youth will be stimulated to enter our colleges. I respectfully urge the change, as holding out the only true remedy for all our difficulties: as one dictated by a sound policy and calculated to secure the approval of all intelligent citizens, and the co-operation of the profession in building up for the Pacific coast a "State Medicine" on the sound basis of polytechnic knowledge.

For the practical fulfilment of the proposed objects, I ask that a committee of three or more be appointed by this society to confer with the professors of the schools of medicine and pharmacy in preparing a bill for presentation to the Legislature, and to be submitted for our approval at the next meeting. I would respectfully suggest that this committee be instructed to nominate a State Board of Medical Examiners, to consist of eleven, as follows: the President of the State University, (to have only a casting vote), the President of the State Medical Society, the Professor of Physiology in the State Normal School, the Professor of Chemistry in the State University, the Secretary of the State Board of Health, two professors from each of the medical schools, one professor from the College of Pharmacy, and the Superintendent of Public Instruction. The provisions of the bill should embody the substance of the resolution of Dr. Oatman,* concerning the doctorate, lying over from our last meeting, and should constitute the above named eleven members, in accordance with the resolution of Dr. Morse,† an independent State Board of Medical Examiners, who shall have power to confer the medical diploma of the State upon all candidates, irrespective of the school or source of instruction in which the applicant has been educated; *provided*, he shall pass a satisfactory examination in descriptive and pathological anatomy, physiology and histology, principles and practice of surgery, organic and inorganic chemistry, prin-

*Dr. Oatman offered the following resolution, which was adopted :

Resolved, That it is the duty of, and we hereby recommend to, the Legislature of California, to pass a law making it a misdemeanor for any person, for any purpose whatever, who is not a graduate of some institution of learning authorized by law to confer the degree of "Doctor of Medicine," who shall place before or after his or her name, in any manuscript, label, wrapper, card, handbill, circular, newspaper, pamphlet, magazine, book, or any advertisement, the word "Doctor," or the abbreviation "M. D." or "Dr.," or any others signifying directly or constructively that the person is a graduate of such an institution, or who shall authorize or sanction the same by others in his or her interest; and that any person found guilty of such a misdemeanor shall be punished by a fine of not less than——dollars, or imprisonment for not less than——years, or by both such fine and imprisonment.

†Dr. J. F. Morse, of San Francisco, introduced the following resolution :

Resolved, That the State Medical Society of California, desiring to see some system adopted by which a high and liberal standard of medical education and graduation may be secured, have heard with great pleasure that our State University contemplates the organization of an Independent Board of Medical Examiners, and we do hereby express the hope that such a Board may be appointed, on a foundation so independent, that, upon their certificate of graduation, a diploma of the University will be granted and conferred, irrespective of the school or source of instruction in which the applicant has been educated.

ciples and practice of medicine, private and public hygiene, obstetrics and diseases of women, materia medica and therapeutics, and the various branches of elementary scientific knowledge.

I cannot bring this paper to a close without tendering my acknowledgments to those members of the profession who have from the beginning so cordially greeted the advent of State or preventive medicine in our midst; and especially to those correspondents, who continue by the contributions of their pens, and their mortality reports, month after month, to sustain the board I represent in the accomplishment of the work for which it was created. Without their valuable aid we would not now be in possession of the statistics, from which has been deduced a death-rate that points to a high physical power, characterizing the entire civil population. No words of mine can properly repay those who have enabled us to arrive at such significant results, and I can only refer them to their own breasts for the reward which every disinterested act of patriotism carries with it. Let us hope and trust that they will continue to uphold the good work, which has been so auspiciously begun, and that others will follow their example in enabling us to complete what has been only partially obtained. We already know by our "monthly reports of deaths and their causes," the comparative death rates of country and city, in many of our counties on the coast and in the interior. If we could now discover the sickness rates, also, it would be a most valuable addition to sanitary knowledge. In cities and large towns, where there are many physicians, it would be difficult to devise any plan for obtaining this object, but in small towns and county seats, where there are only one or two physicians, who are acquainted with the condition of health in every family, a very close approximation to the absolute truth may be reached. In addition to establishing in reliable and positive terms this important item in State medicine, we would also be enabled to arrive at other statistical facts of great value in indicating the strength of the State, which is the sum of all the effective people, after deducting sickness and disabilities.

All of which is respectfully submitted.



REPORT ON MEDICAL MICROSCOPY.

BY J. H. WYTHER, M. D., OF SAN FRANCISCO.

Medical microscopy has a wider application than the observation of specimens under a high magnifying power. It relates to the various methods of preparation and examination, so as to distinguish morphological elements and their relations, and determine their functions in the animal economy. The time has gone by when simply slicing tissues or picking with needles and testing with acetic acid can be deemed sufficient preparation for microscopical research. The mechanical and chemical isolation of various structures require time and skill, and a knowledge of the effects of numerous reagents, rendering this branch of medical science too laborious for the majority of practitioners. Yet this science is the foundation of those rapid advances which have been made in every department of medical knowledge during the past century. Upon a true histology rests all advance in physiology and pathology. A glance at any of the recent text-books on these subjects will suffice to show how much has been accomplished within a very recent period. The researches of Schleiden and Schwann respecting the elementary cell, which formed the basis of physiological knowledge thirty years ago, have been largely modified. A cell is no longer considered to be a bladder-like substance with cell-wall and contents. The *sarcode* *Dujardin*, which Haller, in 1766, regarded as the glutinous cement of the tissues, has been shown by Max Schultze (1861) to constitute the bodies, not only of infusoria, but also of elementary animal cells. To this Huxley has given the name of protoplasm, a term around which many a philosophical contest has already been waged. Dr. L. Beale having discovered that certain nuclei in this elementary matter receive a separate

stain from carmine, and that amœboid movements are limited to such particles, proposes to call them Bioplasm—living or germinal matter. Whether this generalization shall be universally accepted remains to be seen, but the industry and eminent skill of Dr. Beale cannot be called in question. The identity of the white blood corpuscles with the corpuscles of pus, mucus and saliva, and the discovery by Cohnheim of the wandering of these corpuscles through stomata in the blood vessels, among the tissues of the body, are largely in favor of Dr. Beale's views.

It is not only in fundamental medical science that microscopy has become important; it is no less necessary in practice. In urinary diseases especially, it has become as essential as percussion and auscultation in diseases of the heart and lungs, while the diagnosis of many tumors is impossible without it. To the great physiological laboratories of Europe the profession eagerly looks for the determination of those questions respecting structure which shall guide the practice of the future; yet our own country is not far behind, if it does not keep pace with them. The microscopic researches of Dr. Woodward, of the Army Medical Department at Washington, together with the independent efforts of others in various parts of the United States, have received cordial approbation in the Old World, and many careful observers have entered this most promising field of research. The peculiarities incident to a newly settled community, and particularly the lack of leisure and means for prosecuting such studies, have hitherto prevented medical men in California, to a great extent, from a large co-operation with the workers in medical microscopy, but this state of things is rapidly passing away. The State Medical Society has made provision for a standing committee on this subject; one of our colleges has established a professorship of this department, and the organization of the San Francisco Microscopical Society proves the interest of the general public in this subject. During the past year several first class instruments have been imported, as well as many less expensive, but of equal optical powers and of more general usefulness. Your committee congratulate the society upon the prospect these facts indicate.



INFANTILE HYGIENE.

BY JOHN C. VAN WYCK, M. D., OF OAKLAND.

The hygiene of an infant from its birth up to the age of two or three years, is a subject demanding as much consideration from the physician as any other on which he may be consulted, and to the young practitioner the questions put by the family and friends, to say naught of that most important "person of the period"—"the selected" monthly nurse, whose self-importance is only surpassed by the crudity or absurdity of her firmly fixed opinions; and whose dicta are generally received as "Delphic oracles" by the entire family, and requires a thorough knowledge of every minutia, and is a matter of the utmost importance in enabling him to build up and retain a practice in that branch of his profession. But as this article is not written as a lecture to students or fledgelings, I shall pass to the questions under consideration, and if, in the course of my remarks, I shall throw some new light on the subject, or recall facts long since forgotten or neglected, I shall be fully rewarded for the time devoted to this article.

An infant is scarcely washed and dressed, ere the question is asked, "Doctor, what shall we give the baby to eat?" Really one would suppose that the helpless little being had made its *entré* into this world in a famished condition, and not a moment was to be lost in relieving the terrible pangs of hunger and averting impending death. Within the memory of some of us, the custom prevailed to a considerable extent of giving a dose of castor oil a few hours after birth to the infant; and the physician who was bold enough to interdict so absurd and injurious a procedure, was regarded by those compendia of infantile therapeutics and necessities, the nurse and grandmother, as knowing very little, if anything, about babies. Happily for

the child, that practice seldom prevails now, but, in its stead, the less baneful, though by no means harmless sweet oil and anise seed tea is suggested to clear the little one out. If to clear it out of the world is the intention, why then there might be some show of reason in giving the drench.

"Natura duce nil desperandum," must, I think, have been first uttered by an accoucheur to an *experienced* monthly nurse or *sapient* granddam, who had raised a large and healthy family on yarb teas, hot gin toddy, (Mother Winslow's soothing syrup was then unknown), and various other villainous compounds too numerous and absurd to mention. An all-wise Creator makes the proper provision for the necessities of the new-born child, and to attempt to improve or reject His plan is an assumption, only equaled by the ignorance and folly of the meddler. On the birth of a child, the breasts of the mother rarely contain any milk, which, to my mind, is the strongest evidence that the child does not require that kind of nourishment. If such was not the case, the same provision would be made for it as for the lower mammals, for whom a bountiful supply is furnished from the maternal font at the moment of birth. There is, however, as we all know, or ought to, a viscid yellowish fluid, the colostrum, in the human breast at the period of child-birth, which not only contains all that is necessary for the nourishment of the infant until the lacteal secretion occurs, but also expedites the discharge of the meconium. An hour or two after birth, the child should be put to the breast, unless the labor has been a tedious or severe one, and the mother needs rest to recuperate her exhausted energies, when it can be deferred for six or eight hours without detriment to the child. Should the amount of colostrum not be sufficient to satisfy the demands of the infant, a little sweetened water is all that is required until the flow of milk, but should this not occur at the proper period, fresh cream diluted with boiling water in the proportion of one part of the former to ten of the latter, with the addition of a sufficient quantity of sugar of milk. It not unfrequently happens that the mother affords too little of the lacteal fluid, or it may be none at all. This truly unfortunate state of affairs is often a source of as much annoyance to the medical attendant as to the mother.

Every visitor who has ever had the care of one child, and

much more so those who profess to have had a great deal of experience in such cases, expatiate on this or that regimen, decrying every other. I regret having to say that medical men entertain almost as great diversity of opinion on this subject as the lay members of the profession, and, to the annoyance of the attendant, he is constantly informed that Drs. A, B, or C, always directed this or that article of food.

Having used, during my noviciate, all the different compounds suggested by the profession, as well as intelligent nurses, I decided that the only rational course to pursue was to approximate as nearly as possible the food intended by nature for the nourishment and development of the child; and the plan long since adopted by me has almost invariably succeeded. Milk of some kind is regarded as a *sine qua non* for the nourishment of the infant, and if all lacteal fluid contained identical chemical constituents there would be nothing to say on the subject of milk diet. Simon's analysis gives the following results:

	Butter.	Casein.	Sugar.
1,000 parts Cows' Milk contains.....	40.00	72.00	28.00
1,000 parts Asses' Milk contains.....	12.10	16.74	62.31
1,000 parts Goats' Milk contains.....	45.06	91.02	43.08
1,000 parts Women's Milk contains.....	54.00	45.02	62.04

The artificial food usually used for infants is the cows' milk, diluted with water, and sometimes sweetened; the dilution being resorted to on the hypothesis of the pure milk being too strong; but the dilution does not tend to diminish the amount of casein in the quantity of the milk given at each feeding, and according to my experience it is this substance which is the most prolific source of gastric and intestinal disorders among infants thus fed. With many goat's milk is regarded as the *ne plus ultra* of artificial food. Although it yields more butter and sugar than that of the cow, it is far richer in casein which, renders it, in my opinion, just that much the more objectionable. For twenty years I have discountenanced the use of diluted cow's milk, substituting properly diluted and sweetened fresh cream, solely on the ground that a nearer approximation to women's milk can be effected than in any other way known to me; and hence there is less liability to produce injurious effects.

Apart from this, I think there are other good reasons for using only the cream, which rises after the milk has stood some

twenty-four hours. Very much of the milk sold in our cities and towns is adulterated in various ways, and in many instances when such is not the case, the cows are improperly fed and cared for. By using the cream only, we avoid in the first instance the adulterating materials, and in the second, we are enabled to give a less quantity of a diseased or abnormal secretion. I have been often told, as doubtless many of you have, that only the milk of one cow is used, consequently the same character of food is always given. What guarantee have the parents for this assertion, admitting, for the sake of the argument, that the milk of one cow is better than the mixture of several, except the dictum of a party whose veracity is often as questionable as the pure country milk, brought but too often from the suburbs, where the cows are kept month after month pent up in unwholesome quarters, and the milk reinforced with starch, coloring matter, sugar, and often dirty water, in order to make up the quantity of so-called milk he agrees to furnish daily to his customers. Again admitting that the milk used is from one cow and that she is well fed and cared for, my objection still holds good. That respected animal may be very valuable to a vendor of milk or a cheese-maker, but not so for butter-making. We constantly have healthy looking, fat children pointed out to us, who have been fed from birth on diluted cow's or goat's milk—children whom we are told have never had a sick day. *Per contra*, how many cases of bowel disorders, convulsions, and inanition, ending in death, solely attributable to the food, or rather poison, may not the physician in full practice recall. The stomach of the young infant was not made to digest starch, muscle, the firm casein of the cow, or goat's milk, and in the very large majority it cannot do so for any length of time without giving unmistakeable evidence of the injury so slowly, yet surely done to the alimentary tract, and through it to the whole system.

Having shown, or rather attempted to show, that cow's *milk* is not a proper article for the substitution of that afforded by woman, I hope I shall be able to convince others that the following description of food as a general rule is the best for an infant who has to be raised "by hand:" Having procured a quart or more of the purest attainable milk, set aside for twenty-four hours, and then skim off, but not too closely, the cream. As the

cream of cows differs in richness from a number of causes, it is impossible to give in figures the amount of water necessary for the proper dilution, I therefore direct the cream to be diluted with boiling water to an extent that will make it as near the richness of the mother's milk at that period as possible, adding enough sugar of milk to bring it up to the natural standard of sweetness. I prefer the *sac. lac* to cane or beet sugar, for the reason that should acidification of the food occur, we have in the former lactic, whilst in the others acetic acid as a result. To be as explicit as possible, I should say that with the cream afforded from the milk ordinarily served to purchasers, the following formula will be found very nearly correct :

	<i>Cream,</i> <i>Part.</i>	<i>Boiling Water,</i> <i>Parts.</i>	<i>Sac. Lac,</i> <i>Parts.</i>
To a child one week old, in good health.....	1	11	25
Two weeks old.....	1	10	25
Three to four weeks old.....	1	8	25
One to two months old.....	1	7	25
Three to four months old.....	1	6	25
Four to six months old.....	1	5	25
Eight to ten months old.....	1	3 to 4	25

Should this prove too strong for the child, it will be necessary to make a further dilution with, if needed, an alkali to prevent acidification. A certain amount of lime water is generally ordered to obviate this result, but experience has proven to me that the bicarbonate of potassa is preferable, for the reason that, as an antacid, it is equally efficacious, while it prevents the formation of so solid a curd, and thereby renders it more soluble. It should be added to the food in the proportion of one quarter of a grain to each fluid ounce, and if curd is found in the excreta, the amount should be doubled. It may, and often is asked why use the cream only? To my mind, the reason is perfectly obvious. It contains all of the salts of the milk; most, if not all the butter, while the excess of casein has been deposited or left in the residuum.

We are frequently called upon to prescribe for infants with whom the mother's milk does not agree. This may arise from different causes. It may be owing to the character of secretion, or attributable to an abnormal condition of the digestive organs of the child. If to the former, either a wet nurse should be substituted, or, if that is impracticable, then artificial food must

be given. Should the latter be the case, it will be necessary to dilute the mother's milk to that degree which can be properly assimilated. Cases occur in which this fails, and it becomes necessary to feed the infant on whey, which is readily made by putting a piece of rennet in the milk, which (the whey) should be sweetened with sugar of milk. Should this prove too strong, as it sometimes does, it should be weakened with boiling water. This character of food is often objected to by both mother and nurse as not affording sufficient nourishment. But if the child does not lose weight and is doing well, why make any immediate change? As to the length of time this course should be persevered in, I say: just so long as any other food fails to be digested. The strength of the food should be gradually increased according to the power of assimilation. We have all repeatedly had cases that taxed our best energies to find an article of diet which would agree with the infant, often failing in the best directed efforts. In extreme cases I have successfully used the expressed juice of raw or very rare beef; giving the child from one half to two or three teaspoonfuls, more or less, *pro re nata*; and had the whole body with exception of the face rubbed with either sweet or cod liver oil. The advantage of applications of the oil is too obvious to dilate upon. Mothers often ask when they can change the food. My reply to this is: as long as the child is improving in strength and growth, and all the bodily functions are properly performed, and there be no other reasons for doing so, let well enough alone, and more especially so if the child is teething. A very common cause of gastric and intestinal derangement in infants is solely attributable to the ignorance of the mother, who can imagine no other cause than hunger for the fretfulness of the child, and consequently gives it the breast or bottle whenever it cries. Regularity in feeding is as absolutely necessary for the well-being of the child as its food. A child of from one to two weeks old should not be allowed to take the breast or other food oftener than once in an hour and a half when awake, gradually increasing the time to every three hours, giving the stomach not only time to fully digest the food, but allowing a period of rest from its labor. Having surfeited you with food for babes in more senses of the expression than one, I will pass on very briefly to other matters connected with the subject of this article.

In my opinion, as common a cause as almost any other of colic, is insufficient warmth, and in the majority of cases an examination will disclose a coldness and dampness of the child's feet and abdomen. An amount of bed or other clothing is not all that is needed in many cases to preserve the natural temperature. The little bodies do not give out any great amount of natural heat, and artificial heat is absolutely necessary in many cases; especially when the child is put off by itself and deprived of heat from the mother's body. A bottle of hot water placed at the foot of the cradle or crib will prove as great a source of comfort to the mother as the child.

Much might be said on the subject of the fashion of infants' dress, and I think that physicians are not a little to blame in this matter, as their opinions on all matters pertaining to the welfare of children are respected and acted upon almost invariably by mothers, who, as a general rule, are ready and willing to make any sacrifice for, and do anything which will add to the welfare and comfort of "the baby."





FOREIGN SUBSTANCES IN THE HUMAN ALIMENTARY CANAL.

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GENTLEMEN OF THE STATE MEDICAL SOCIETY: It is not my design to attempt an elaborate essay on the above subject, but simply to give some particulars of a somewhat remarkable case occurring in a patient in the asylum for the insane for the State of Nevada—now located at Woodbridge, San Joaquin County, California. J. G. H., male, white, native of the State of Pennsylvania, aged 37 years, single; cause of insanity reported in commitment, intemperance; admitted April 10th, 1872. The Sheriff who had charge of the patient, stated that he had lived an irregular life for some time previous to his attack of insanity, which declared itself about four weeks previous to his admission to the asylum. During that time he had been temporarily confined in the second story of a house in Virginia City, Nevada, and that while so confined he tore the bedding and broke the windows of the room, finally ending his incarceration by a leap through the second story window to the sidewalk below, fracturing his arm by the fall. He had swallowed many indigestible substances, such as hair, glass, leather, cork, cloth, tacks, shoe heels, with tacks projecting full half an inch from the surface of the leather, vest buckles, pins, needles, etc., some of which I show you in this box. I regret to state that about a cigar box full of the substances passed was mislaid and lost, but I think an examination of the specimens before you will convince the most skeptical of the remarkable tolerance of the

human stomach and intestines to the contact of harsh and indigestible substances. I find in Gross' System of Surgery a reference to several remarkable cases of the same nature, but he adds, "*they all ultimately proved fatal.*" Dr. Watson also alluded to a celebrated "knife eater," who swallowed thirteen jackknives of various sizes at different times, but he adds, "*they killed him at last.*" I do not know but the insanity of my patient may have increased the natural tolerance of his system to irritation, as seems to be the case in tubercle of the insane; nevertheless, I am able to state that my patient *recovered* and is in the enjoyment of good health at the present time, as I have recently heard and believe. There were in all forty or more bits of window-glass passed, of which I here present three of the largest, viz: one, four inches in length by one inch in width; one, three and one quarter inches by nearly one inch, and a rhomboidal piece, one and one eighth inches in diameter, two inches long.

Many of the smaller pieces of glass are an inch or two in length, with very sharp points. You will also see in the collection all of the cork which was contained in a ladies' No. 5 cork shoe sole, with the patent leather covering and cloth lining of the same. The iron vest buckle is over an inch and a quarter across and twisted so as to present its sharp points to the best advantage. The "Eureka hair" is in wads or masses as thick as an ordinary walking-stick and several inches in length.

There was a dozen or so shoe tacks, taken as condiment, I suppose, to the previous viands, which, as well as the needles and pins, were very much corroded. About two weeks subsequent to his admission (April 10th, 1872) the first of the offending substances was observed in the night stool, and the last which passed was about February 1st, 1874, making a period of nearly ten months during which something was passed every few days. At first his bowels were somewhat constipated, but about July 1st, 1872, diarrhoea became a prominent symptom, the evacuations becoming sanguineous and largely mixed with mucus and pus. The stomach was very irritable, scarcely a day passed without more or less vomiting; sometimes a hair or two would appear in the ejecta, but no glass or other substance of a foreign nature was vomited. There were several periods when

the evidences of peritonitis were strongly marked, the features becoming pinched and shrunken; pulse small, frequent and hard; the pain severe and constant; abdomen tympanitic and tender; but, fortunately for the patient, they yielded to appropriate treatment.

On his admission to the hospital he was well nourished and muscular, but subsequently emaciated very much, losing fully one-third of his weight. His mental condition—*acute mania*—improved rapidly from the date of his admission for several weeks; in fact, he appeared perfectly sane for a period of several months, but subsequently relapsed into sub-acute mania, which finally disappeared about six months after his bowels were entirely free from foreign matter. The greatest pain was felt in the ilio cœcal region, where some hard substance might be plainly felt through the attenuated walls of his abdomen. A spongy, hair-like substance could also be made out at times. The treatment pursued consisted in the administration of morphia and cannabis indica, bismuth and mucilages internally and warm fomentations and cataplasms externally. At one time I administered one grain of morphia with forty drops of fluid extract cannabis hourly for a period of six (6) hours before relief was manifest. The functions of the liver were disturbed at times, as indicated by a jaundiced hue of the skin and conjunctiva, but the bladder was little disturbed at any time. His appetite was capricious, but eventually became normal and his normal weight and strength were fully re-established at the date of his discharge—July 2d, 1873. When he left the asylum he exhibited no traces of insanity.





ON THE VARIOUS METHODS OF TREATMENT OF ANCHYLOSIS OF THE KNEE JOINT.

BY DR. A. ANDREI, OF SAN FRANCISCO.

The subject to which I desire to draw your attention, at this time, is upon the relative value of the various methods of treatment instituted in complete or incomplete ankylosis of the knee joint. The outward pathological rotation of the leg, (admitted by Dural and Phillips in the false angular ankylosis of the knee), and which has not escaped the observation of Dieffenbach, Bouvier, Velpeau, Frariess, and Guerin, has taken its place in pathological surgery after the publication of the treatises on sections of the tendons and artificial diseases by Bonnet, and under the heading of "Consecutive Luxations of the Knee, anteriorly and posteriorly."

This kind of displacement, the most common of consecutive luxations, is not a sudden disease, but develops itself gradually. The patient, seized with acute or chronic inflammation of the knee, is very naturally disposed to hold his leg in a semi flexed position, this being a position in which the articular capsule of the knee offers a much larger capacity and the articular surfaces are much less compressed.

But in this position, most favorable for rotation, whenever the disease attacks the tendons of the rotary muscles, the leg is influenced by a greater degree of rotation, and the patient, in order to give the limb the necessary support, is obliged to rest it upon one of its lateral surfaces—generally the outer one, and if the surgeon does not hasten to straighten the articulation, by forcing it to rest on the posterior surface, he will soon, to his regret, see rotation to the outward of the leg, which, by reason of its great immobility, becomes fixed; that is to say, it passes

into a state of false, or complete ankylosis, according to the nature of the organic alterations that have taken place inside and outside of the joint. The joint once immovable, rotation of the leg is easily recognized. The knee, apart from any material lesions which preceded, occurred simultaneously with, or followed the luxation, has lost completely or incompletely all its motions. The internal condyle of the femur projects on the inside, and the axis of this bone takes a well marked oblique direction from outside to inside. The patella is displaced on the external condyle, and in most cases is strongly adherent and ankylosed thereto, forming projections more or less marked on the anterior and exterior aspect of the joint, a condition which renders the concavity seen on the posterior face and occasioned by the displacement of tibia much more striking. The leg is bent toward the thigh and the head of the tibia is pushed back above the condyles of the femur, and where rotation is most manifest it is found on the outside.

The longitudinal axis of the leg undergoes a change of direction contrary to that of the thigh, namely, from an open angle on the outside, more or less marked.

The foot, on the other hand, undergoes rotation on the outside. In the beginning of rotation, the movements of the joint are not impossible, and by taking for our guidance the physiological principles of the movements of the leg and the surgical rules for the treatment of luxations, the reduction is not difficult. This state represents the first period of the pathological rotation of the leg.

Later, adhesions begin to form, the spreading plasm to organize, flexion is not difficult, and reduction with the simple assistance of the hand impossible.

This is the second period of the deformity, and luxation passes into a state of false ankylosis.

Lastly, the adhesions are wholly formed, organized into a fibrous mass; all motion becomes impossible, the patient can make no use of the limb, because the axis of both leg and thigh do not correspond, and therefore presents the condition of complete ankylosis.

This is the third period of outer and inner luxation of the knee.

Pathological anatomy teaches how the several changes in

symmetry, correspondence, and direction are consummated between the femur, tibia, and patella, and when of several years' duration, they remain even after death; and even subsequent to the period of rigor mortis, direct mechanical reduction is a matter of great difficulty.

The alterations observed in the autopsy of these joints vary considerably, according to the kind, degree, and duration of the disease before or after luxation.

During suppuration of the articulation, the intra-articular cartilages are ulcerated, softened, perforated, absorbed, and destroyed. The bone, thus laid bare, is bathed with a blackish purulent matter and caries or necrosis of points is visible over the surface.

In cases where the articulation has not suppurated, a very different order of lesions is found, whether there is an escape of organizable matter or not. namely: either adhesions or simple deformity of the articular surfaces.

When consecutive luxation has lasted for a long time, the cartilages are absorbed and the spongy tissues of the articular bones unite. The capsule is destroyed and a very close union is established between the various parts of the articulation, a union which is first fibro-cellular, but which afterward passes through every degree of organization.

At last, this alteration of the bony surfaces is observed in those parts which have long rested in contact, and it is thus that the posterior parts of the condyles of the femur and the anterior portion of the head of the tibia are devoid of cartilages and more or less deeply excavated.

Furthermore, the popliteal artery may undergo such a shortening or softening that it is liable to break in a mechanical straightening, as it once happened in a case of Louvrier.

Now, the most correct conclusion that can be deduced from what I have stated is, that the difficulty is not so much owing to the impossibility of the reduction of the luxation when old and developed to a state of perfect ankylosis, but to the alteration of the tendons of the external rotatory muscles, anterior recti, crural biceps and triceps, and of the external lateral ligaments, to which are united the adhesions and alterations of the articular surfaces.

Before Bonnet nobody had investigated the question how

long and painful diseases of the knees often produce consecutive luxation outside and behind, as well as anchylosis, which is produced by the pressure of the bed on the external side of the calcaneum.

Nor is the patella exempt from such visitations, because, while the upper part of the tibia is drawn out (and this bone also undergoes a movement in the same direction) the ligamentum patellæ, which runs along the spine of the tibia, draws the patella to the outer side of the knee, and thus is placed in front of the external condyle of the femur. So it happens that luxation outward of the patella, often accompanies that of the tibia in the same direction. It is a fact that whenever patients have kept the external lateral position in diseases of the knee of long standing, the luxation takes place outside and behind.

If the lateral position cannot be considered as the exciting cause of frequent consecutive luxation of the knee, it is, nevertheless, the most exact expression of the degree of displacement, and of its combined pathological elements, a subject that greatly interests the clinic, for attention to position precludes the possibility of the occurrence of these accidents.

Thus we understand how interesting becomes the question of prophylaxis of consecutive sub-luxations of the knee, for by preventing this displacement, we obviate anchylosis, arising from long immobility, and the patient tortured just for a moment experiences immediate relief, and the symptoms indicate gradual, but sure restoration to health.

Twenty-seven years ago, Bonnet made strenuous efforts to take up the clinical principle, of which the first formula was, straightening of the knee at the beginning of the disease, quieting the pain, and guarding against resolution, for the purpose of preventing such terrible accidents.

It was long before the old system of letting the patient choose his own position could be abandoned, especially in true affections, in consequence of the pernicious teaching of Pott and Sharp, spread over the continent by Lassus. It was known that these practitioners recommended the lateral half-bent position for fractures of the leg.

Physiology and practice have done away to-day with those old ideas and have shown the advantage of the clinical princi-

ple, namely: that in all diseases of the knee, nothing is more dangerous than the lateral semi-flexed position, while the dorsal position, if early practiced, is sure to prevent luxation of the knee outside and behind.

The reason is obvious; in the first position, the condition of the external rotatory muscle is in its greatest state of relaxation, while its antagonistic muscles are more or less stretched. If the patient becomes rigid in this position, the contrary movements are impossible and the joints more or less immovable; there is a pathological rotation of the leg on the outside. Velpeau has explained the displacement behind the head of the tibia by means of the retraction of the flexor muscles of the leg, but Bonnet, not finding this reasoning satisfactory, put forward a theory which explains the mechanism by which luxation is produced.

It is this: "An interesting point in the evolution of these diseases, and of which the surgeon can never be too often reminded, is, that the patients recline on the diseased side and make the weight of the limb rest on the outer part of the heel, the knee being half bent. It thus happens that the lateral, external, and posterior ligaments of the joint are drawn tense. The inferior extremity of the tibia is bent inward and forward by the pressure from lying on that side, whereas the upper part is pushed out behind. Then takes place the double displacement, and through this the head of the tibia glide more or less out and behind the condyles of the femur; while the leg, on the other hand, undergoes a rotary movement, by means of which the point of the foot turns out and the heel in."

But the prophylaxis, of which we treat, is not accomplished by these methods alone. If the inflammation is such as to produce pseudo-membranes, or if it has invaded the external fibrous tissues of the joint, retraction of the external rotatory muscles must be prevented, this being the strongest fibrous fasciculus which surrounds the articulation, the alteration of the articular surfaces, and the ankylosis which follows it.

All this is obtained by movement in the proper position, which must be carefully maintained. We are aware that the movements during inflammation, whether acute or chronic, are known to be very painful, and that simple ankylosis has been considered a happy termination; we should practice

and demonstrate the contrary, that light and surgically direct movements are not dangerous or exciting in inflammatory conditions of the articulation. I would simply remark that straightening the limb and the use of movements during inflammation of the knee have been much feared, and in our ignorance of these physiological movements, and the agents by which they are produced, good surgical rules are impossible.

Now in our case, the movement must not be violent and sudden, but gentle, and with the greatest possible slowness, and, after a moderate extension, prolonged for some time in the direction that the leg takes in semi-flexion, for, in this position, all the parts are relaxed and ready for an effectual traction.

The best method to attain this result is by means of a wire box or apparatus stuffed with horse hair, and articulating under the knee so as to hold and support the limb in a semi-flexed position throughout its entire length, forming a double inclined plane, regulated on a notched surface.

This apparatus would represent in the simplest form the articulated groove of Delpech.

In very painful diseases, the extension should be made very slowly, from the simple weight of the leg, and in chronic diseases, by means of any weight proportioned to the strength required, or by means of a screw.

The patient laid horizontally on his back, the limb is placed in the groove, using a degree of flexion least painful to him, and extension is then brought into requisition. The patient then remains quiet for three days. Then, day by day, a slight and gradual diminution of the angle of the double inclined plane is made, until the leg is straightened. After a few days the leg is brought back into a semi-flexed position, and every day a slight movement of rotation in and out is practiced. Following this method, all parts of the joint are either equally relaxed or stretched; the constant change of position practiced with moderation precludes all bad consequences arising from immobility, and the progress of the disease not being aggravated by any displacement, or by immobility, goes on as in any other part of the body.

We can sum up in two categories all the methods hitherto employed by surgeons for rupture of the ankylosis of the knee, which can be used when the knee is straight, simply

aiming at restoring the movements, and, when the knee is bent, to give it its correct lines:

First—Instantaneous mechanical straightening. Force being applied to the knee and at the points of support at the extremities of the leg and thigh; the straightening is done by the simple action of the hands.

Second—Progressive mechanical straightening. Force and support being brought to bear on the posterior surface of the leg and thigh, or in the popliteal space, or on the knee, either singly or combined with tenotomy of the flexors of the leg.

The first category comprises the machine of Louvrier.

This surgeon conceived this powerful apparatus, which served at the same time to break the adhesions and to straighten the leg instantly on the thigh.

In 1839 he made numerous applications of this instrument in Paris; but the gravity of the accidents and its very frequent failures, induced the Academy of Medicine of Paris to reject the use of this apparatus.

When we try to break angular ankylosis of the knee with the hands, we can stretch and bend the leg to the thigh. We naturally feel inclined to use the first method, or that of direct extension, but it offers a great number of disadvantages. In using this method there are two difficulties to overcome, namely, the adhesions that unite the bones must be broken, and the retraction of the muscles and fibrous tissues in the hollow of the popliteal space, which oppose the straightening, must be overcome.

It is, no doubt, better to solve these two problems successively by first bending the leg, by which we rupture the adhesions of the tibia and patella with the femur, in order to accomplish the straightening. The anticipated flexion of the leg on the thigh has not only the advantage of rupturing the ankylosis without the attendant difficulties of extension, but it has still a tendency to produce this rupture by a backward movement of the tibia, which cannot be done without the patella slipping along the femur and being detached from this bone when it is adherent. This method was first put into practice by Dieffenbach, preceded by section of the tendons in the popliteal space.

Langenbeck, in 1846, for the first time, tried to rupture the ankylosis of the knee by the simple action of the hands. The

modus operandi, the indications, and the consecutive treatment have been so perfected by the great German surgeon, that the operation may be considered to-day, according to him, one of the surest and simplest in surgery.

The other method of progressive straightening, by mechanical appliances, is very good in cases of simple flexion, but it is a useless loss of time when used in the treatment of true ankylosis with outward pathological rotation of the leg. For in this case, the greatest difficulties are presented by the retraction of the tendons of the popliteal space—an obstacle which can only be overcome by tenotomy. The rupture of ankylosis by means of forced flexion of the leg after sub-cutaneous section of certain muscles, has been brought forward by Dieffenbach, Bouvier, Duval, etc., and followed by a large majority of surgeons.

Another *modus operandi*, and really a very scientific one, is that of Dr. Palasciano, Surgeon of the Hospital of the Incurables at Naples; a method based on an entirely new idea in anatomy and physiology, the credit of which belongs essentially to the Neapolitan surgeon alone.

The occasion compels me to be brief, and I shall confine myself to describing the anatomical and physiological point which establishes the originality of the method, omitting all detailed description of the *modus operandi*, readily comprehended when once the principle is clearly defined.

Like Dieffenbach, Palasciano forcibly bent the knee, in order to rupture the ankylosis, making sections in the popliteal space, and adding to these surgical proceedings the sub-cutaneous section of the anterior fasciculus of the triceps and of the external aponeurosis of the thigh, and of the muscle beneath.

It is generally believed that flexion and extension are the only movements possible in the articulation, and that the leg is incapable of pronation and supination exhibited by the forearm; a close examination of the functions of the knee does not confirm this opinion, widely spread, in spite of the indications given by Richat and the vigorous and extensive works published by the brothers Weber in the *Anatomical Encyclopedia*.

When the leg is stretched on the thigh, it is true that it can-

not turn in any way, but, as soon as it is bent on the femur, it can execute movements of rotation with an extreme facility. Any one can notice the existence of these movements by placing the finger on the head of the fibula and alternately moving the point of the foot inward and outward. In this experiment, the head of the fibula does not remain immovable; it becomes more anterior when the point of the foot moves inward, and more posterior when it moves outward. The Weber brothers have, by numerous experiments, ascertained the extent of these movements with great precision.

Palasciano has tried to solve the question, published in his memoir in 1847, which was discussed before the Society of Medicine of Lyons, namely: "What are the Agents of the Rotatory Movements of the Leg?"

Messrs. Weber considered the biceps muscle as the outward rotatory muscle, and ascribed the inward rotation to the popliteal muscle and the three muscles forming the goose's foot—a view which gave to these muscles the double function of flexion and rotation.

While indorsing the doctrines of Messrs. Weber on the rotatory functions of the thigh muscles, Palasciano was lead to believe that the muscle specially intended for outward rotation was the one designated by classic authors under the name of tensor of the fascia-lata muscle. This muscle, which, in common with Chaussier, we will henceforth call the ilio-aponeurotic, to prevent all false ideas as to its functions, is attached to the crest of the ilium, and below, to the femoral aponeurosis, but it is not lost in this aponeurosis, as the biceps does not end at the upper part of its tendon. It is easy to recognize in the composition of the fasciculus of the fascia-lata; it presents itself under the appearance of very resisting longitudinal fibres, which, starting from the ilio-aponeurotic, are attached to the entire circumference of the external tuberosity of the tibia. These fibres may be considered as a flattened tendon, confounded with the aponeurosis; they take such a direction and present such resistance that the muscle cannot contract itself without acting through shear medium on the tibia. This action, if brought to bear on the flexed leg, necessarily involves outward rotation.

Leading up to this anatomical introduction, Palasciano re-

marks that during life the bent leg cannot be carried in outward rotation without noticing the hardness and swelling, manifest by placing the hands on the ilio-aponeurotic—phenomena which admits no doubt as to the existence of its contraction.

The entirely new ideas of Palasciano on the use of the muscle, considered, until his discovery, as the aponeurotic tensor, explains a tendency, the cause of which Richat vainly explored, and for which, in the following language, he demanded an explanation: "Why is the internal portion which corresponds to those numerous muscles, covered with an aponeurotic lamina, and why has it no tensor muscle?"

If the thickest part of the femoral aponeurotic contains a muscle, it is not there for strength, but for a widely different purpose, namely: the outer rotation of the leg.

It must be remarked how beautifully everything harmonizes in this anatomical arrangement; supination of the leg is impossible in the extension of the knee; no muscle tends to produce it in this position; the ilio-aponeurotic is as powerless in this respect as the biceps; but should the leg bend and outward rotation become possible, instantly the biceps and ilio-femoral are so placed that, in the event of contraction, they present the phenomenon of rotation.

These considerations have led to the adoption of the views of Palasciano as to the functions of the ilio-aponeurotic, and have added to the knowledge with which the works of the brothers Weber have enriched physiology on the causes that produce rotation of the leg. The therapeutical application he has made of these ideas, in the reduction of consecutive displacement of the knee, demonstrate their truth and importance.

The practical conclusion arising from the method of Palasciano, constituting the essential difference between Dieffenbach and himself is, that the former, in his operations for straightening knees affected with angular ankylosis, particularly exaggerates flexion and performs it several times on the limb before straightening it.

In this movement of flexion, the strongly stretched ligamentum patellæ may pull the patella from the vicious position where it is fixed, give it back its mobility, and permit its acception between the two femoral condyles. But Palasciano thought that, by cutting the rotular tendon of the femoral quadriceps

muscle, the flexion would, with greater certainty, break the rotular adhesions. This bone, no longer held up by the quadriceps or bearing on the femur, must succumb with greater ease to the action brought to bear upon it by the ligamentum patellæ, as well as to all those forces that tend to move it. The combination of the forced flexion of the leg with section of the triceps is a bold idea, but, nevertheless, correct. Moreover, Palasciano makes the section of the ilio-aponeurotic muscle as the agent for outward rotation of the leg and, consequently, a means of reduction of the consecutive pathological luxation of the knee, finishing the consecutive treatment by the use of apparatus. Sawing of the bones has been practiced in the treatment of the deformity. In America, Rhea, Barton, and afterwards, Gibson and Platt-Burr, have successively performed this operation.

I think that I have now briefly reviewed the different operative procedures suggested and practiced in the treatment of ankylosis of the knee, and have given a sufficiently extended illustration of the prophylaxis, which, in my opinion, constitutes the fundamental point, and the negligence of which causes us to deplore the disastrous results which places the surgeon in the most inexcusable position. In fact, from the beginning of an articular affection of the knee, we begin by applying the first elementary principle, namely: immobility and suitable treatment. If by chance we are called to see a patient, which, unfortunately, too often happens, where an advanced stage of the disease of the knee joint is established, that is to say, where complete flexion has taken place with pathological luxation, acute pains, fever, general emaciation, and suppuration, the duty and common sense of modern surgery does not suggest, but imposes a single treatment, namely, stretching the leg and applying the most suitable apparatus; then, in the space of hours, not days, an unexpected change will be noticed, procuring relief and repose to a poor sufferer already condemned for an indefinite time to the most cruel sufferings.

At the present moment I have, and have had under treatment for a month and a half a poor little girl, received in the above mentioned condition, and in whom the change would appear most remarkable to one unacquainted with the wonders of modern surgery. It will afford me great pleasure to submit the little patient to your observation at the residence of its parents. The examination of this case cannot fail to prove satisfactory and instructive.



REMOVAL OF TUMOR INVOLVING PAROTID GLAND.

BY LEVI C. LANE, M. D., OF SAN FRANCISCO.

From my note-book I take the following case, which presents some points of surgical interest:

Some time since, I was consulted by a fireman in reference to a tumor seated over the left parotid gland and partly buried beneath the tragus of the corresponding ear. The man informed me that he first noticed the tumor some six months previous and stated that it had lately commenced to trouble him by having become the seat of severe neuralgic pains. Another curious fact was that converging strabismus was slowly developing itself in the left eye as well as partial deafness in the left ear.

The patient was advised to submit to immediate extirpation of the tumor, and, with more prompt decision than is usually met with, he consented to have it done at once. The tumor seemed to be movable, but, upon making an incision upon it, it was found not to be so, but to immediately proceed as an outgrowth from the parotid gland itself. Such a condition, of course, excluded all idea of enucleation, as I had intended, so that, to complete the removal, I was forced to excise a portion of the parotid gland. The facial prolongation of the external carotid having been laid bare for a considerable extent by the operation, in order to prevent any secondary hemorrhage which might occur, the precaution was taken to tie the vessel.

On examining the section of the parotid that had been removed, and which amounted to about one-fourth of the gland, I found that the lobules constituting it had undergone hypertrophy; the structural changes resembled those of adenoma.

As the wound healed, the patient was found to be almost entirely freed from the terrible hemicranial neuralgia from which he previously suffered; the strabismus and partial deafness remained, however, unchanged.

Nearly two months after the operation—the wound meanwhile having wholly healed—the patient called again upon me and stated that his former neuralgic pains had returned more violent than ever. I now proceeded to make a very careful examination of all the parts upon the left side of the neck and face. By accident, during the examination, I discovered that pressure upon the corresponding common carotid artery caused a complete cessation of the pain. My ordinary remedial agents having been tried in vain, I conceived the idea of ligating the vessel as the only means that offered any probability of relief to the patient. Having made known to the patient the risks attending it, he consented to the operation, whereupon I ligated the left common carotid artery below the omo-hyoid muscle. The ligation completed, I was gratified to find that there was complete cessation of the previous hemicranial neuralgia. The wound healed rapidly; the ligature came away about the twelfth day. The patient remained afterward entirely free from his neuralgia.

NEW SURGICAL PROCEDURE FOR RELIEF OF ECTROPION.

Some six years since, in a case of ectropion of the lower eyelid, resulting from the cicatricial contraction consequent upon a burn, I relieved the deformity in the following manner: The palpebral conjunctiva was pared off with curved scissors to the extent of three-fourths of an inch in length and three lines in breadth; the paring commenced near the inner canthus and reached toward the outer one; it occupied nearly the middle portion of the lid. As soon as the bleeding had ceased, a small and slender-bladed scalpel was made to enter near the inner canthus and to come out on the side opposite to the point of entrance; the cutting edge of the instrument was then carried towards the outer canthus as far as the before mentioned paring had reached. Thus, it will be seen, a long tongue-like flap, raw

upon its upper and lower surfaces, was lifted up from the inner surface of the lid. In forming this flap particular care should be taken that the nutrient base, by which it is connected near the inner canthus, be sufficiently large to maintain the part alive. The next step in the operation consisted in making through the lid an elongated incision immediately beneath the flap, and corresponding to the latter in length and direction. The third stage of the operation consisted in drawing the flap through the incision made and securing it there by means of small sutures. The effect of drawing the flap through the lid was found to be the restoring of the latter to its normal position, and thus withdrawing from view the unsightly, inflamed conjunctival surface, which, from the eversion of the lid, was hitherto constantly exposed.

The advantage of this method is that the offending tissue itself is utilized and made to contribute to elevating and rectifying the previously everted lid.

This operation I have now performed five times—three times upon the lower lid and twice upon the upper. In all the cases the effect was to greatly relieve, if not to entirely remove the deformity.

For reasons readily apparent to anatomists, it is better adapted to the lower lid than to the upper one.

In the first case in which I tried this method, I observed with interest, mingled with some anxiety, what would become of the fractional portions of the Meibomian glands that were contained in the flap. I am happy to state that no trouble arose from them, they having probably atrophied.





ON FOREIGN BODIES IN THE EYE.

BY DR. A. BARKAN, OF SAN FRANCISCO.

I believe I am justified in supposing that the society will feel interested in and will kindly give its attention to a few remarks which I propose to make on the subject of traumatic lesions of the eye—a group of diseases frequent in occurrence, important in their consequences, and which, on account of their requiring immediate relief, come often under the observation of the general practitioner.

The space of time allotted to me is so short that I must confine myself to those traumatic cases where foreign bodies perforate the walls of the eyeball and remain lodged in the same; these cases, owing to the extensive mining industry in this and the neighboring States, happen almost daily. The accidents creating these cases are mostly occasioned by chips of steel and iron, snips of guncaps, splinters of wood, grains of gunpowder, fragments of rock and glass, or small shot, striking and entering the eye; in some rare instances, these foreign bodies may remain lodged in the interior of the eye for a long time, even permanently, without causing inflammatory symptoms, without impairing the vision, and even without the patient being aware of the presence of a foreign body within the eye. These cases are, however, very rare, and, as a rule, foreign bodies lodged in the eye will immediately cause serious inflammation and not only, in many instances, destroy the injured eye, but will also endanger the sound one through sympathetic ophthalmia.

If foreign bodies strike the eye on its most unprotected part, the cornea, they may remain lodged within the tissue of the

cornea, causing slight symptoms of irritation; they are generally easily detected and removed and may not leave a trace of the injury. But the case becomes more serious if the foreign body, being fixed by a part of its substance in the cornea, protrudes with another part into the anterior chamber; the danger of inflammation of the cornea and iris is then considerable and necessitates the immediate removal of the foreign body in order to avoid grave consequences. If the foreign body penetrate the cornea entirely and become lodged in the anterior chamber, adhering to the iris or the cornea, or lying free at the bottom of the anterior chamber, severe iritis or iridoperiphacitis is liable to ensue and to greatly endanger the eye. There are, however, a few cases on record where foreign bodies have remained lodged in the anterior chamber for many years without doing any serious injury to the eye or causing sympathetic affection of the sound eye. A case which came under my observation about a year ago will serve as an excellent illustration. The patient was a German; he stated that in the year 1866, whilst firing off a gun, a part of the cap struck and perforated his left eye, causing at the time inflammation and some impairment of sight. Shortly afterward, the eye apparently recovered and troubled him no more for a few years, when it again became troublesome and the patient went to Berlin to consult Professor Von Græfe, who examined the eye and, not detecting any foreign body, supposed that it had become imbedded in the interior of the eye, considered that it would be best not to interfere with it. For some years afterward the patient's eye did not trouble him till, about six months previous to my seeing him, he, whilst examining his eye in a looking-glass, perceived, for the first time a minute blackish body lying at the bottom of the anterior chamber. During those six months, the patient suffered little inconvenience from the presence of the foreign body, but concluded, after consulting me, to follow my advice and have it removed, so as to give the eye permanent rest. The foreign body must have been lying for years in some part of the eye in the rear of the iris (the lens being luxated downward and the vitreous body liquified,) and must have found its way into the anterior chamber, probably whilst the patient was stooping far over at a moment when the pupil happened to be much dilated. I made

a lineary incision on the cornea-sclerotical border and removed the foreign body with a small piece of the iris to which it seemed to have adhered, without any difficulty. The patient's sight was tolerably good after the operation, and I have not heard that his eye has caused him any further trouble.

Foreign bodies lodged in the iris, or injuring it on their passage to the back of the eye, will always lead to serious inflammatory processes, which are generally not confined to the iris itself, but involve, sooner or later, the cornea, the ciliary body, and choroid, and if not removed, will, in most cases, cause total loss of the eye. Usually, except when hemorrhage ensues in the anterior chamber, there is no difficulty in detecting the foreign body within the fibres of the iris, for it soon becomes imbedded in pus, which forms a yellowish little tubercle around it, and thus greatly facilitates its detection. The danger to the eye is still further increased if a foreign body, perforating the sclerotic, has found its way into the inner part of the eye into the regions of the ciliary body by wounding or by being lodged in it. The injuries implicating the ciliary body are of a most serious nature and lead to disastrous consequences, not only by ruining the affected eye in most instances, but often endangering the other eye, which may suffer from sympathetic inflammation.

If sharp edged foreign bodies have struck the eye with sufficient force, they will rarely remain lodged in the sclerotic, ciliary body, anterior chamber, or iris, but penetrate through these parts into the inner part of the eye, lens, vitreous body, and the rear bulbar wall, on their way to the rear of the eye; especially when hitting the cornea they will come in contact with the lens, which may lead to a partial or total dislocation of it, or may cause a wound in its capsule, and either remain lodged in the lens substance or penetrate and get into the vitreous. The danger which arises from traumatic lesions of the lens lies in its capsule being opened, and the aqueous humor coming in contact with the fibers of the lens, causing these to become opaque and swell up—traumatic cataract—thus leading to a considerable increase in the volume of the lens. The swollen lens, by pressing on the iris and ciliary body will readily create secondary inflammatory processes in these parts, because the development of traumatic cataract generally takes place within a long space of time, and because the foreign body

before reaching the lens will too often have injured the membranes in front of it by bruising and wounding the cornea and the iris.

In some rare cases, the foreign body being small in size and having made its way into the lens through the pupil, may remain lodged in it, causing slight, or even *no* inflammatory symptoms. *One of the most remarkable of these cases came a few months ago under my observation, and although the case being a very interesting one—I have sent the details of it to the archives for publication—I will allude to it here, as it is a case which may be looked upon as unique in more than one respect: E. Morgan, a blacksmith, was hammering at a cold piece of steel in Ophir District, Utah Territory, when he felt a momentary sharp pain in his left eye, caused by a foreign body striking it. He bathed the eye for a few minutes with cold water, and on examining it found it was in a perfectly normal condition—no hemorrhage or swelling, or injection being perceptible. He rested his eye the next day, and the slight feeling of soreness which he had experienced entirely disappeared, and as he felt satisfied that there was no foreign body lodged in the eye, continued working for five weeks, when one day happening to take up a paper he discovered that he could not read common print with the injured eye, and came to San Francisco to consult me. Much to my astonishment I found that a minute pointed chip of steel had penetrated the cornea near to its center, and had passed through the anterior chamber and pupil, without apparently injuring the iris at all, into the lens body, in the rear and upper part of which it remained lodged; owing to its minuteness, and the route through the pupil which the foreign body had taken, it could penetrate the lens without causing any inflammatory symptoms—the corneal as well as the capsular wound closing right behind the foreign body. I easily ascertained by the ophthalmoscope that traumatic cataract had commenced to form, and that this was the reason of the vision being impaired. The particle of steel remained firmly imbedded in the lens during four months, never since it had first taken up its quarters there having caused the slightest irritation or pain. After the whole lens had become opaque, and the vision of the eye had gone to such an extent that the patient could just discern motion of my hand in front of the eye, I performed Von Græfe's modified

lineary extraction—removing the opaque lens, and with it the foreign body, which was exceedingly minute, weighing .0,0006 m'grammes, and measuring $1\frac{1}{2}$ " in height, and 1" in width. The operation proved a complete success, as regards the removal of the foreign body out of the eye, and complete restoration to sight; the wound was perfectly healed in a few days after the operation, and when I dismissed the patient he could read easily by the aid of cataract glasses number one print—the smallest print in our text-books.

Foreign bodies rarely remain lodged in the lens; only too often they penetrate through the lens into the vitreous, or find their way into the inner eye through the sclerotic and ciliary body. In either case, the foreign body generally penetrates first to the opposite wall of the bulb and, after having wounded or lacerated retina and choroid, sinks back into the vitreous, where it remains lodged. The result of these injuries are generally of a most disastrous nature, because, in addition to the wounds and consequent severe inflammation which the foreign body causes in those parts of the eye through which it passes on its way to the vitreous body, the vitreous itself becomes rapidly inflamed and disorganized and finally panophthalmitis ensues with total loss of the eye. A few cases have been recorded where foreign bodies became encysted in the vitreous body and remained there many years without causing any irritation, but even in these cases, the sword of Damocles is constantly hanging over the eye, and the foreign body, after having been safely encysted for many years in the vitreous humor, may give rise to severe inflammatory symptoms and lead to loss of the eye and sympathetic ophthalmia.

In exceptional instances, a foreign body may finally be lodged in the rear of the bulb after having penetrated through the vitreous body and after having caused the severe inflammatory symptoms just described. In the majority of cases, when a foreign body has entered the eye, the pain will be severe, the vision greatly impaired, if not entirely lost, and the eye will become sensitive to touch. Examination of the injured eye with oblique light and the ophthalmoscope will, in many cases, assist materially in ascertaining the presence of the foreign body and, consequently, help in forming the prognosis.

The prognosis will depend upon the size and shape of the

foreign body which has entered the eye; the place where it has entered; the force with which it has entered; or, in other words, the depth into which it has penetrated. If the foreign body is small, and has not penetrated farther than the anterior chamber or iris without wounding the lens or the ciliary body, the prognosis is rather favorable, and the eye in all probability will recover after the foreign body has been removed; should, however, the iris have been wounded or bruised extensively, the danger of iridocyclitis ensuing is great, and the prognosis becomes still more unfavorable; if the foreign body has found its way into the lens, wounded the ciliary body, or remained lodged in the same, once in the vitreous humor the foreign body nearly always causes total loss of the eye; shape, as well as the sight being destroyed, for the bulb shrinks and becomes atrophied. The danger which the presence of a foreign body in one eye causes to the sound eye, by the rise of sympathetic inflammation, should always lead us to frame the prognosis very cautiously, and induce us to give the matter most earnest consideration. With regard to the treatment, it is almost superfluous to state that it should at once be directed to subduing the inflammation; to making ice applications to the eye; to applying leeches to the temple, and using energetic applications of a strong solution of atropia. When there is an accumulation of pus at the bottom of the anterior chamber, or an increase of the tension of the eye, paracentesis of the eye, with or without iridectomy, will be indicated, but above all, the removal of the foreign body out of the eye should be effected—a proceeding which, in those cases where the foreign body is lodged in the cornea, anterior chamber, iris, lens or sclerotic, will lead to complete or partial restoration of the sight, or at least to the saving of the eyeball.

In those cases, where the foreign body has penetrated into the deeper part of the eye and is out of reach of the surgeon's instrument, and in all cases where the presence of a foreign body in the eye has been ascertained and when it has led to serious inflammatory processes—in which, generally, the whole eye-ball takes part, causing loss of sight and great sensitiveness of the eye—the removal of the eyeball will be indicated. As the risk of sympathetic inflammation of the sound eye is very great, especially in those cases where the iris and ciliary body have

been extensively wounded and the foreign body has penetrated into the vitreous humor, we must bear well in mind that, in those cases, the injured eye is generally irreparably lost; that sympathetic ophthalmia may quickly ensue; that its course, once started, cannot be checked, and that the delay of removal of the injured eye will, in too many cases, cause sympathetic affection and total destruction of the uninjured eye.

I must now conclude, gentlemen. The subject upon which I have had the pleasure of addressing you is a comprehensive one, and I fear I have failed to do it justice in so limited a paper; yet a few of the points I dwelt upon may eventually lead you to do a great deal of good and to often save the injured eye, or, at least, protect the other one from sympathetic inflammation; and then, neither the hints which I gave in this paper, nor the time during which you have kindly listened to the same, will be entirely lost.





TREATMENT OF FRACTURE OF THE FEMUR.

BY G. W. DUTTON, M. D., OF TOMALES.

I desire to call attention to some modifications of the ordinary treatment of fracture of the femur, practiced by me for several years, of which the profession will judge whether anything herein suggested is new in principle or minutiae; and, if so, whether the use of such may not add to the comfort of the patient and convenience of the surgeon, as well as assist in making the cure of this lesion more perfect.

I may here remark that in treating fractures of this nature in a country practice, patients, in at least half the instances, judging from my recollection of cases, have to be transported for a more or less distance to their homes, after receiving the injury. We ought not to expect persons to be considerate enough to go home before getting their limbs broken; consequently, if a fracture bed can be devised that will facilitate this removal without requiring a change of bed when reaching the house in which the patient is to lie, we save, thereby, unnecessary movement of the fractured bone, unnecessary suffering to the patient, and unnecessary trouble to ourselves.

A device with these advantages was suggested by M. Mayor, years ago (in an article on "Hyponarthecia" in the treatment of fractures) which he denominated "Clinical Frame," but which I shall call "Fracture Bed." It may be described as follows: Two side-pieces, six feet eight inches long and about two inches square, are placed together like quilting frames, with canvas, ticking, or duck stretched across and tacked to the side and end pieces. An oblong opening, about ten inches long and five inches wide, is made in the canvas at the place where the

buttocks are expected to rest. This opening should be hemmed around the edges. I also pass extra pieces of canvas across from one side-piece of the frame to the other, above and below this opening; and then other pieces of canvas along each side of the opening, from one extra piece of canvas to the other. Of course these extra pieces of canvas are placed on the under side of the bed and are used to prevent the buttocks from stretching the opening and thereby sinking lower than they should.

A sheet with an opening corresponding to the one in the fracture bed, covers it. The patient is placed on this apparatus before attempting to reduce the fracture. The surgeon makes extension with his hands during the time of moving the patient on to the fracture bed; and, during the time of the application of the adhesive plasters and roller, this extension is kept up by an assistant. If the patient is to be moved some distance to his house, temporary attachments can be made to the head-piece of the frame with the perineal band, and to the foot piece with Barton's handkerchief, applied around the heel and instep. This width of three feet of the fracture bed is convenient for transportation in an ordinary two-horse spring wagon, and can be passed through an ordinary door by tilting it to one side, with two additional assistants to steady the patient. Before placing the fracture bed on the ordinary bed—and any ordinary bed will answer as well as an expensive hospital arrangement—the footboard should be removed, so that the fracture bed may protrude—say six inches.

Extension and counter extension next demand the surgeon's attention. It is unnecessary to describe the manner of applying the adhesive plaster now so generally used in making the attachment for extension. I will merely say that I like to continue the plasters up to the knee; then pass a turn of the roller between the plasters and malleoli; that I am careful to have the stretcher below the sole of the foot, long enough to relieve these prominences from the pressure of the plasters, and that I find it more convenient to apply two wide pieces of plaster, one on each side of the limb, and sew them together below the sole of the foot, than to use one entire piece for both sides. If it is necessary to apply the plasters in the cold air, or if heat cannot be readily obtained to make them adhere, they

may be easily made to do so by brushing them over with the oil of turpentine. At the expiration of about three weeks the plasters should be changed to new ones. If not, they are liable to slip, from the exfoliation of the epidermis.

For my convenience I have contrived an adjustable pulley attached to the foot of the fracture bed by a clip, in the same way that hand sewing machines are attached to a table. A perpendicular stem made of five eighths round iron and fifteen inches long is screwed down through both shanks of the clip. A pulley is mounted on the upper end of the perpendicular stem with a swivel joint controlled by a thumbscrew just beneath the pulley; there is also a thumbscrew at the center of the clip, to control the revolving of the stem in the clip. By this arrangement we can raise or depress the pulley, as I have often found it desirable to do, without in the least disturbing the cord in the groove of the pulley or the weight used. This pulley and attachment can be made by any country blacksmith, and can be attached to any bedstead in a few minutes—a tin can containing shot is used for weight. In making the permanent counter-extension the perineal band is, in most instances, unnecessary and barbarous. This contrivance should be used but temporarily until we can bring to bear the permanent and better counter-extension, or permanently only in cases in transit where the motion of the vehicle or vessel prevents the use of the better means. By simply raising the foot of the bed about ten inches we get all the counter extension we want by thoroughly preventing the patient from slipping toward the foot of the bed; besides, if he does slip down a little, no shortening can occur, for the weight only approaches nearer the floor, dragging the limb toward the foot.

Having perfected the arrangement for extension and counter-extension, it is next in order to coaptate the broken bone as nearly as possible. We add shot to the tin can until the broken limb measures in length at least as much as the sound limb in its *unextended* condition—Barton's handkerchief, to which a cord is attached and passed over an extra pulley, is put on the sound foot and as much weight applied as was used on the broken limb. The objects of this is to put the ligaments of the knee and hip joints of the sound limb as much on the stretch as

those of the broken limb are, before we use the sound one as a criterion in measurement. After extending the sound limb, enough weight should be gradually added to the broken one, to make it measure the length of the sound one in its *extended* condition. Time should be taken to do this. I have sometimes gradually added a little weight every few minutes for the space of two or three hours before the spasm of the muscles was overcome, so as to allow the broken limb to be drawn out sufficiently. During this time, when the weight is kept on both limbs, I use two sheets, one on each side, for perineal bands, attached to the head of the fracture bed, to keep the patient from slipping toward the foot; and, as soon as the weight is removed from the sound limb, I remove the perineal bands. The amount of weight necessary to use for an adult is from fifteen to twenty two pounds.

In making the measurements I use the very accurate device of Hon. Oliver Allen, a scientific mechanic and philanthropic gentleman, long a resident of our county. I have also received other mechanical suggestions in the treatment of fractures from the same source. Allen's measure consists of a straight piece of wood or other material, (to be placed longitudinally and centrally over the patient), long enough to extend from the occiput to a point below the feet, and about one inch square, on which are marked inches and fractions of inches; a transverse-piece, eighteen or twenty inches long, marked as the first, and crossing it at right angles at the pelvis; and processes near the ends of this crosspiece, and at right angles to it, which processes are intended to pass the ilium at the same point, say the anterior, superior spinous process, on each side. There is also a process from the upper end of the longitudinal piece, passing backwardly over the center of the occipital bone. The try-square, placed on the longitudinal piece opposite the tuberosity of the tibia with the arm of the square pointing first to one side, then to the other, will tell us unerringly whether the broken bone is coapted if the limbs are equidistant from the longitudinal piece and each one alike extended, without eversion of the broken limb and without lateral displacement. I am positive the surgeon must have both limbs alike extended and have a more accurate method of measuring than the old one, before he can be certain he is not deceiving

himself in measurement. The difference between a limb in its extended and unextended condition is about half an inch—sometimes more, sometimes less—as any one can easily convince himself. This statement is not made by guess or from theory, but from actual observation, and I would take pleasure in *proving* its correctness whenever called on so to do. It is at least probable that this error in measurement and the heretofore imperfect manner of measurement are the two principal reasons of surgical authorities teaching that “in spite of our best efforts there will always be *some* shortening,” and “if a case results in but half an inch shortening, it is a good case.”

For the purpose of preventing eversion of the limb I have heretofore used the sandbags; for these to answer the purpose perfectly, close attention of the attendant is required. Mr. George Sceva, formerly of the East Indian Service and now of this county, has recently shown me a contrivance devised by him, which I think well of and which I wish to test. It is constructed of hoop iron, put together with copper rivets. About twelve inches in length of one piece lies crosswise of the bed, opposite and outside of the foot of the fractured limb. At a point on the bed just outside of where the adhesive plaster passes the external malleolus, this piece is bent at nearly right angles, to pass up outside and over the top of the foot. A piece of the hoop iron is bent clip-shaped and riveted to the upright piece, to embrace the foot. A straight piece of the material, fourteen inches long, to pass along the outside of the leg, is riveted to the upright portion opposite the external malleolus. The leg is fastened to this piece, and the heel and instep to the upright portion of the first described piece, by fillets. A brace extends from the outer end of the portion lying crosswise of the bed, to the upper end of the piece. Of course, padding is used where necessary. It seems that this arrangement may answer the double purpose of preventing eversion, and supporting the weight of the bed clothes from off the foot.

If the fracture is of the shaft, the bandage of Scultetus is applied from above the knee to the groin; and, outside of this bandage, narrow and thin pieces of wood, or of pasteboard, entirely encircle the limb at the place of fracture.

These splints are first secured by pieces of tape, and after-

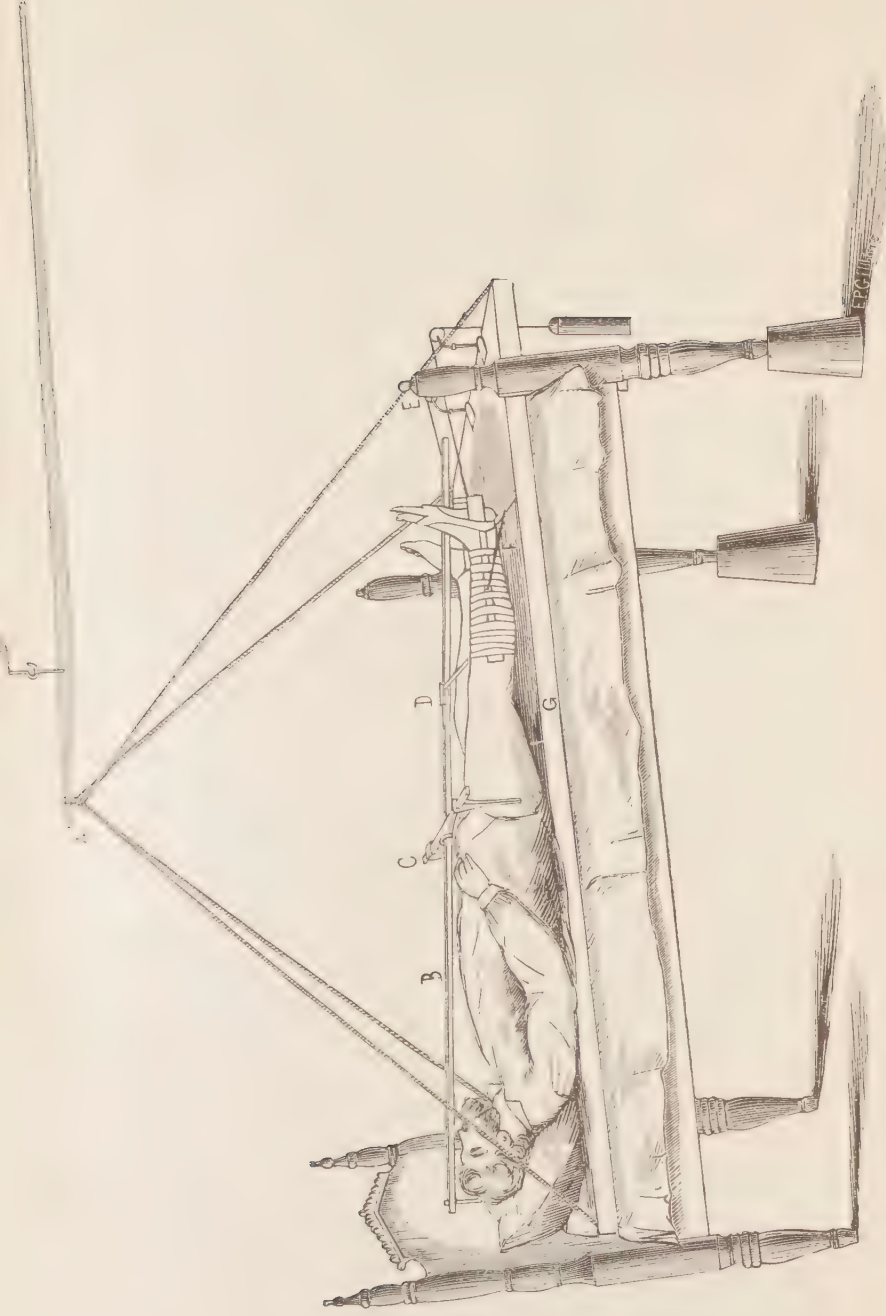
wards more firmly by continuing the roller from the upper ends of the adhesive plasters to the groin.

If the fracture is of the neck, bags, seven or eight inches wide, filled with sand, are used—one on each side of the pelvis. As, by reason of the weight of the patient, the canvas stretched across underneath him is lower as we approach the hips from each side of the fracture bed, these bags of sand gravitate toward the hips, and in this way press the trochanter toward the acetabulum. After a few days the patient can recline in bed, and finally sit nearly upright during treatment. We next complete the fracture bed by constructing the hoisting apparatus. Ropes are extended from each corner of the fracture bed to a common center, toward the ceiling, and at this common center are tied to the end of a pole—say nine feet long—which is attached to the ceiling about eighteen inches from the above described center, by means of a rope and an eye-bolt. The benefits to be derived from this arrangement in airing and making the bed, and in facilitating the movements of the bowels, without disturbing the fractured bone in the least, can hardly be appreciated, until the apparatus is used. Indeed, to leave the question of transportation entirely out, I would much prefer this rude and impromptu arrangement of bed, to any of the complicated and expensive hospital beds heretofore seen by me in the Atlantic cities.

In place of lengthening out this paper—already prolonged beyond my expectation—by detailing cases, I will simply say that I have treated three cases of fracture of the shaft and one case of the neck (intra-capsular) in accordance with the plan herein detailed, with the result of no shortening whatever, so far as the most careful measurement could detect, in the three cases, and ligamentous union in the intra capsular case. In this last case, the advantage of this mode of treatment was shown by the ease with which the patient (aged 67 years) bore confinement. I should have said, however, that I used the sand bags in place of Scova's apparatus.

While I am aware that four cases are a small number to draw deductions from, I am yet aware that one case closely studied may be more instructive to the surgeon than a large number treated cursorily.

For illustrations of the apparatuses described in this paper, and manner of using them, see accompanying cuts.



The above engraving represents the manner of measurement with extra pulley and weight on sound limb; also, fracture-bed with hoisting apparatus.

A—Hoisting Apparatus.

B—Measure,

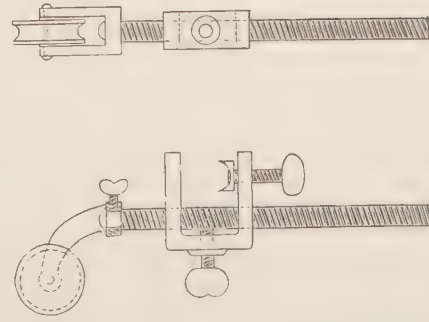
C—Transverse piece to square pelvis.

D—Try Square.

E—Extra Pulley,

F—The Inverter,

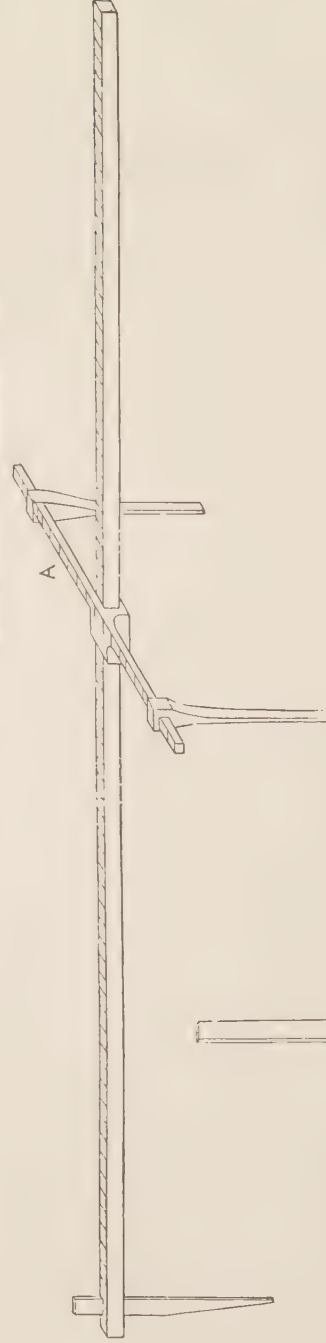
G—Fracture bed.



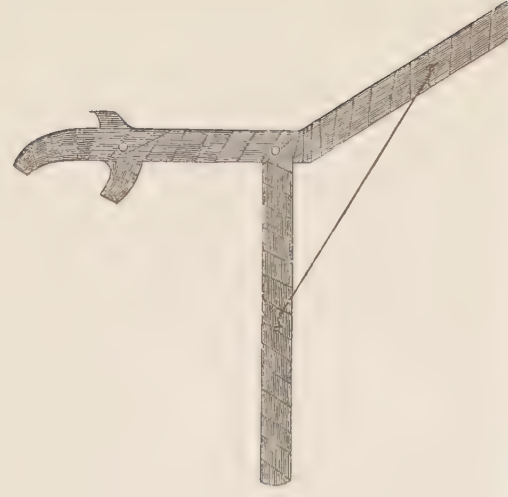
Adjustable Pulley with Cup Attachment.



Transverse Piece to square pelvis.



Try Square.



Sceva's Inverter.



ON THE TREATMENT OF URETHRAL STRICTURE BY INTERNAL SECTION.

BY CHARLES BRIGHAM, A. M., M. D., SAN FRANCISCO.

The operation of dividing urethral strictures by internal incisions, dates from the sixteenth century, when Ambrose Pare used a pointed and cutting sound in order to penetrate more easily through the contracted urethra.

It would be as tedious as impracticable either to call by name the various advocates of this operation, or to describe the different instruments which have been invented for it. Let it suffice to say that while good and respected authorities have approved the method as such, it remained an unfruitful operation until recent years, when M. Maisonneuve, of Paris, perfected the instrument, as well as the manner of operating, and the subsequent treatment. The instrument is known as Maisonneuve's Urethrotome. It consists, first, of a flexible filiform bougie, with a female screw at one extremity; second, of a curved steel conductor, grooved on its concavity, at the extremity of which is a male screw, fitting the female screw of the filiform bougie; third, of a steel wire, armed at its extremity with a thin triangular blade, to the base of which is fixed the wire, while the apex is blunt, and its two sharp sides slightly concave. This wire glides within the groove of the conductor and the blade is destined to divide the stricture. The filiform bougie acts as a guide to the conductor, to prevent its making a false passage; by patience and strategy it can be passed through a very narrow stricture and thence on, until a "plunging in a vacuum" assures the operator that it has entered the bladder. In certain tortuous strictures, where there are sudden deviations

of the urethra, the passage of the filiform bougie may be greatly facilitated by twisting its extremity over a pin, so as to give it a corkscrew or bayonet shape, as suggested by M. Leroy d'Etoilles. It is of the first importance that this conducting bougie should be passed through the stricture to the bladder, for unless this can be done, the operation is impossible. We will suppose that this bougie has reached the bladder; to the female screw at its extremity is then fitted the male screw attached to the conductor. As the latter instrument enters the urethra, it pushes the bougie before it into the bladder, where it curls up and remains so until the operation is finished.

A word about the conductor. That employed by M. Maisonneuve at the present time is curved, with a groove on its concavity; now it has been suggested that a straight conductor is better than a curved one, and also that if the conductor is curved, that the groove had better be on its convexity than upon its concavity. The disadvantage of a straight conductor is that it puts the urethra on a stretch in the subpubic and prostatic regions; it thus opens a risk of an uneven and irregular section of the stricture. To be sure, the subpubic portion, which is the most frequent seat of strictures, is normally quite dilatable, but it always preserves its curve as such and is much less elastic when it is the seat of a stricture than it is in the normal condition. The objection to the groove on the convexity of the conductor is this: that we run a risk of hemorrhage from the proximity of the bulb, whereas, on the upper surface of the urethra, the corpora cavernosa become thinned toward the median line. Of course, there is not much danger of hemorrhage in either case, as the stricture is the only part cut, and this tissue is not provided with vessels of any importance. We will suppose the grooved conductor in place having been passed along the urethra to the bladder; we are next to choose the blade, (for they vary in diameter from one half to one third of an inch), and pass it along the groove in the conductor. It will be seen that the blade has two cutting edges, so that it cuts as it goes, and, again, as it returns, it divides the tissues, if any remain uncut after the first section. This simple arrangement does away with the disputes as to whether a stricture should be cut from before backward or the reverse, for it accomplishes both at the same sitting, and a stricture, however elastic, would

not be likely to escape section in one or the other of the knife's movements. Its blunt apex prevents the knife from injuring the healthy tissue of the urethra, and, although the walls are always in contact, they yield without difficulty as the knife advances. The stricture is cut through easily, almost painlessly, so that it is not necessary to give anæsthetics, unless there is extraordinary sensibility of the urethra; the meatus being the narrowest part, its size will indicate that of the blade. The stricture once cut, the knife and afterward the conductor are withdrawn; the latter is unscrewed from the filiform bougie, to which is now attached a straight steel rod of the same diameter as the conductor; over this rod is slipped the bougie, which is to remain in the urethra: for this purpose, bougies are made open at either extremity and well supplied with eyes, as M. Reverdin remarks, "three eyes are worth more than two;" there can then be no hinderance to the free exit of urine. The diameter of this bougie should always be somewhat less than that of the blade; the stationary bougie glides over the filiform bougie, which still acts as a guide, and then once the former is in place, the latter is withdrawn, and the urine passes away freely. The importance of this stationary bougie is very great: its object is not to press the cut sides of the stricture apart and prevent their reuniting, for they are usually pulled apart by the elasticity of the stricture itself, and they stay apart until the wound is filled up with new tissue, just as a wound repairs itself after a loss of substance. The aim of the stationary bougie is to carry the urine away from the bladder in such a manner, that it will not bathe the freshly made wound until the cut vessels have become plugged up with a coagulum, so it avoids as much as possible the danger of the urine entering the blood and giving rise to urinary intoxication. It is the custom to leave this bougie fixed in the urethra for a certain number of hours, varying from thirty-six to forty-eight; it may be left longer, but its work is accomplished by this time, and it is apt to irritate the urethra or the bladder if left in for a longer period; it may be readily conceived that hemorrhage may result from its too speedy withdrawal.

So much for the instrument and the mode of operating. The questions now arise, "Are all strictures to be operated on indiscriminately by this process? Is there any preparatory treat-

ment necessary? What is the subsequent treatment? What is the danger in the operation?" It has been argued that disease of the bladder or kidneys or excessive induration of the canal counter-indicate the operation; that putrid, ammoniacal urine, arising from such conditions, would be especially mischievous to a fresh wound of the urethra. Now, does not the stationary bougie, by protecting the wound, do away with this objection? Is it not the stricture, by holding back the urine, that has been the cause of these complications in the majority of cases? Are we not taught by the best principles of surgery to remove the cause as soon as possible? If we try progressive dilatation with bougies, we are apt to irritate the already sensitive canal and bring on an attack of urinary fever, possibly from a single passage of them. Sir Everard Home persevered twenty years in the treatment of a stricture of the urethra; the same work could have been accomplished in as many seconds by internal urethrotomy. A diseased state of the bladder or other complications may influence the prognosis, but can by no means counter-indicate the operation; indeed, it becomes in these cases the only means of safety and permanent relief to the patient, and we believe M. Perrin in the right when he considers complications a reason for hastening the operation. There are certain fibroid, easily dilated strictures where the urethra is but little contracted and not at all irritable, in which progressive dilatation would answer all the purpose. It is well to bear in mind that it is slow work and offers little, if any, chance of a radical cure. There is another indication for internal urethrotomy in cases where it is desirable to perform lithotomy or perineal section, and in which the urethra is so contracted by stricture, that a guiding staff cannot be passed. The preparatory treatment is very simple. No one knows exactly why, but of late years it has been the fashion to give quinine in two or three grain doses during the few days previous to the operation, increasing it immediately afterward. M. Gosselin is in the habit of giving a tea made of parietaria, so as to dilute the urine and make it more alkaline by the nitrate of potash contained in it; he also gives the patients warm baths and orders absolute repose during a few days. It is better to empty the bladder before operating, so that the urine may not trickle along the conductor and bathe the wound

as it is made. It is also well to give an enema, so as to empty the rectum and do away with all possible irritation to the wound from that source. After the stricture is cut and the stationary bougie is secured in place by a silk thread, fixed to the penis by a strip of plaster, it will be well to syringe a little tepid water through the bougie, to assure one's self that it is free throughout; the patient is kept in bed, his knees supported by a pillow; he takes only thin soups and diuretic drinks for nourishment; his urine dribbles away into a urinal at his side, and if it is thick, a flaxseed poultice is placed over the bladder. At the end of thirty-six hours or so—depending on the amount of irritation—the bougie is withdrawn; at the first subsequent micturition, the patient feels a smart burning at the seat of the incision. All is compensated for by the size of the stream, which is such as the patient may not have seen for many a year. The urethritis, which invariably occurs, is seldom severe, lasting perhaps ten days, and disappearing as the urethral wound heals. This it does readily, and is soon covered with epithelium, like the rest of the canal. Some ten days afterward, a dilating bougie, a size smaller than the stationary one, is introduced; it passes without difficulty and is left in but a minute or two daily during a fortnight. In thus passing this bougie once a week for several months, its size may then be increased. During a year after the operation, the patient is obliged to pass a bougie monthly, by way of precaution, otherwise he is liable to a relapse.

There is a case recorded by M. Perrin, in 1865, in which, two years after the operation, the autopsy showed that the urethra was of the same calibre throughout, although no bougie had been used—this is an exceptional case. It is not the cicatricial tissue of the new wound that contracts, for it remains supple and of the same size as before; it is the old tissue of the stricture that continues to close in. The importance of occasionally passing a bougie after internal urethrotomy, is so great that certain writers have declared that half of the success of the operation depends on the patient—whether he be faithful to the advice about passing the bougie or not.

What are the dangers of the operation? On this point Sir Henry Thompson says: "I have seen free but never dangerous hemorrhage, and sometimes a smart attack of fever, but

never abscess, extravasation of urine, inflammation of the bladder or kidneys." The urethritis usually ceases within twenty days; the danger from pyæmia is inconsiderable. The fever following the internal section is slight and, in most cases, hardly worthy of notice. If, however, there is a chill, with rapid changes of temperature and profuse sweatings, with depression, we have reason to suspect urinary intoxication; all the more so if the patient has been affected with muco purulent-cystitis, or with a chronic urethritis. As a point of prognosis it may be said that the later that the chill comes the more favorable for the patient, because the vessel-mouths being obliterated by the third day there will be less danger of an absorption of urine into the system. Should there be a persistent elevation of temperature, trouble in the bladder or kidneys would be suspected. The actual *modus operandi* of urinary intoxication is but little understood. We know that urine (especially if it be putrid) causes inevitable death to an animal when injected into its blood; so in ruptures of the urethra, when the urine comes in contact with the blood, we sometimes have the severest constitutional sinking. We need not be astonished to find a urinary fever following the section; it is encouraging, however, to know that the greater number of patients escape, and of those attacked, the majority recover speedily. The statistics of the operation are very favorable: M. Gaujor reports eleven cases, with two deaths; M. Ledillor, ten recoveries; M. Gosselin, thirty-five, with one death; M. Guyon, sixty-three, with one death. The cases of M. Maisonneuve are very numerous, but I am unable to give the statistics of them; he was accustomed to perform the operation several times a week throughout the year at the Hotel Dieu, at Paris; I remember four successive cases that were fatal, owing probably to an epidemic of erysipelas then prevalent in the wards. Dr. Whittell, of Mendocino City, has operated on one case successfully; I myself have had two—both recovered. The treatment of stricture has realized a great progress in internal urethrotomy. As to its dangers, we can indorse the statement of M. Reverdin, "that urethrotomy is comparable, as far as gravity goes, with the most innocent operations in surgery."



COUNTER-EXTENSION BY THE LONG SPLINT IN FRACTURES OF THE SHAFT OF THE FEMUR.

By JOHN MILLINGTON, M. D., RESIDENT PHYSICIAN AND
SURGEON AT ST. MARY'S HOSPITAL, SAN FRANCISCO.

It would seem at first thought that the uses of this splint had been discussed in all its bearings, and that every point about the thigh and pelvis had been used for counter-extension; yet there is one broad field still unoccupied and undescribed in the various works on surgery. That field I wish to present for your consideration, namely: the application of counter extension to the *muscles* of the thigh in fractures of the shaft of the femur. This method of counter-extension was first proposed and applied by Dr. L. C. Lane, of this city, surgeon-in-chief to St. Mary's Hospital, and for several years we have been perfecting it, and have used it successfully in over forty cases. Its mode of application is as follows: Apply to the sides of the leg six strips of adhesive plaster, two and a half inches in width, and of sufficient length to reach from the knee to a point twelve inches below the foot—place three on a side overlapping each other—then apply four transverse strips of the same width, and of sufficient length, to go once and a half times around the leg, at equal distances apart. Bandage evenly over the whole, including the foot; twist the free ends of the plaster into two ropes, tie, with a surgeon's knot; introduce a notched block, four inches in width, to prevent lateral pressure on the malleoli. The limb is then ready for extension. Next apply three strips of plaster, three inches in width, over the quadriceps extensor and sartorius muscles, and three strips of the same width over the flexor muscles of the thigh—let them

be of sufficient length to reach from a point four inches above the knee to the top of the shoulder; place over them four transverse strips of the same length as on the leg and bandage from knee to groin; twist the free ends as before, pass them through the head of the splint, and tie; now attach the lower end of the splint. Make extension gradually, as the plaster holds better if it is allowed time to set. Pad between the limb and splint, and secure the limb to the splint by eight separate strips of bandaging, or straps with buckles will better answer the purpose—use a broad bandage around the body and the head of the splint, securing thereby immobility of the limb and counter-extension, corresponding as nearly as possible, to the long axis of the body. After the limb is fully extended, which, in most cases, will be within twenty-four hours, remove the four straps above the knee and place on the limb at equal distances apart four concavo convex splints of a length corresponding from the knee to the groin. If there be any tendency to displacement of the fragments, the short splints may be padded accordingly: bandage over them, independently of the long splint, and apply straps as before. The requisite outward inclination of the foot may be given, by lashing the long splint to foot of bedstead. The condition of the limb may be examined from time to time, by pressing aside the folds of the bandages. The circulation by this method of counter-extension being not interfered with, swelling and œdema of the limb is of rare occurrence. The long splint used must be of sufficient length to extend from the axilla to a point six inches below the foot. The several splints in use, models of which are here represented, are improvements on those used by Desault, Liston & Physick. No. 1, with the screw attachment, is the most easily managed, the surgeon having only to give the screw a turn occasionally, to keep up the requisite amount of extension. No. 2 possesses the merit of being easily constructed; the extension is made by the cord attachment, and it requires two persons to apply the force; the cord should be tightened every second day. No. 3 is the bracketed splint, of which something will be said hereafter.*

In a case where both thighs have been broken, two long splints can readily be framed together, padded, and laid on a

* These various splints were exhibited before the society.

attachment, which is very convenient for the nurse and secures for the patient all of the immobility desirable. As absolute rest is not essential to union in fractures, the patient may be lifted out of bed from time to time, for the purpose of having it made, and at such times, the surgeon may, at his option, rearrange the splints and bandages without fear of retarding union in the least. A running stitch down each side of the limb will effectually prevent the bandages from slipping and becoming tighter in one place than another. At the end of the second week, when all swelling which may have been present when the limb was set, will have passed away, strips of adhesive plaster passed around the limb, splints, and bandages, will most effectually secure the limb in position. In compound fractures, the bracketed splint may be used—the counter-extending strips applied, to suit each particular case; the Scultetus bandage will be useful in these cases, thereby allowing the wound to be examined and dressed as often as may be necessary. The straight position being now universally recognized by all the leading surgeons of the world as the best method of treating fractures of the femur, nothing need be said here in its favor. The chief points claimed for this method of counter extension in the straight position are:

First—There is no shortening of the limb in simple fractures of the shaft of the femur.

Second—That more perfect coaptation of the fragments can be got by this method than by any other that is known, thereby insuring greater strength in the limb after union.

Third—It is less fatiguing and painful to the patient; a majority of those treated never complained of pain after the first three days.

Fourth—That more perfect counter-extension can be made by this method than by any other yet described, the rationale being that the force is applied directly to the body of the muscles, which cause the displacement of the fragments, these muscles being thereby the more effectually controlled.

The following cases will illustrate its applicability:

CASE No. 1.

Captain G., aged 57, was brought to the hospital, June 29th, 1873. He stated that thirteen months prior to his admission,

hair or moss mattress, or upon a fracture bed with the bedpan he had a fall on ship-board, which fractured the thigh bone; that his limb had been set, but that it was a great deal shorter than the other leg, which greatly interfered with the pursuit of his business. He wished to have the bone refractured and set over again, if his leg could be made longer. We examined the limb, and found on measurement that it was three inches shorter than its fellow. On the next day we put the patient under chloroform, broke up the adhesions, applied extension and counter-extension in the manner heretofore described, and extended the limb to the same length as the other. At the end of the tenth week we removed the splints; the fractured ends were firmly united, and no shortening was apparent by the closest measurement. The patient now states that, with the exception of a slight stiffness, the limb is as useful as ever.

CASE No. 2.

Mr. D., aged 30, came to the hospital, December 17th, 1873, with fracture of the femur, four inches below the great trochanter. The accident had occurred three weeks previously on ship board, the limb had been set, but was shortened two inches. The patient was placed under chloroform, the adhesions, which were slight, broken up, extension and counter extension made as in the previous case, and the limb brought out to its proper length. Eight weeks after, the splints were removed; no apparent shortening was found, and to-day the limb is as useful as its neighbor.

CASE No. 3.

Mr. M., aged 23, came to the hospital, August 24th, 1873, with his right leg badly injured by a large stone rolling over it. We found on examination that the femur was fractured in two places near its center; the tibia had a compound fracture near the ankle joint, and two of the toes were cut off. Owing to the bruised and swelled condition of the limb for the first two weeks, we made use of sand bags and lotions; at the end of that time the swelling and œdema having been reduced, extension and counter-extension were applied as in the previous cases, with the exception of the cross-block, which was long enough to prevent the extending bands from pressing on the

lower third of the limb—the foot and that portion of the limb were separately bandaged, so as to allow of its being readily dressed. The fractures united slowly, owing to a scrofulous tendency in the patient's constitution. At the end of the fifth month, however, they were firmly united, and the two limbs were of equal length.

The foregoing cases exemplify the utility of this method of counter-extension. Case No. 1, previous to his admission to the hospital, had been treated for over one year; the muscles had been shortened three inches, yet under the effects of chloroform they readily gave way and allowed the limb to be extended to its proper length. Case No. 2, prior to admission, had been treated by the Desault splint and the penneal band. Case No. 3 was difficult of management, on account of the compound fracture near the ankle joint. In several cases of fracture of the neck of the femur we have used this method of counter-extension with excellent results, using at the same time other means, such as the gutta-percha hip splint, pelvic band, etc. We have also applied it in fractures of the tibia when there was a tendency to shortening, with excellent results. The application of extension in the manner heretofore named we claim no originality for, but have described it, so as to make it clear and simple where a great extending force is required, and to have that force evenly distributed over the limb. For the manner of counter-extension we do claim originality. The application of a counter-extending force over and below the fracture was, when it was first proposed, considered a wild theory, but tentative practice has proven in our hands its complete feasibility. As an objection to the straight position in fractures, it has been urged that it leaves the knee in a partly ankylosed condition, which it takes a long time to get rid of. This condition is, however, entirely prevented in the following manner: Let the surgeon at the end of the third week detach the limb from the long splint, and, by the aid of an assistant, to firmly hold the thigh within the short splints, bend the knee several times; do so weekly, thereafter, until union is perfect in the fracture. In some cases the plaster will need changing once or twice; in others, it will hold without slipping during the treatment.



AMPUTATION OF BOTH LEGS.

AFTER A MODIFICATION OF ESMARCH'S METHOD OF CONTROLLING HEMORRHAGE IN SURGICAL OPERATIONS.

BY JOHN C. VAN WYCK, M. D., OF OAKLAND.

April 7th, 1874, I was summoned to attend R. B., æt. 60 years, native Californian. Had always enjoyed good health, and been temperate in his habits. About thirty minutes before I saw him a locomotive had run over his lower extremities. On examination, found both feet terribly mangled, and crushed into almost a shapeless mass. The left leg was nearly severed, some six inches above the ankle, being retained by a small portion of the skin and superficial tissues on the dorsal portion. Further examination disclosed a fracture of the eighth and ninth ribs near their spinal articulations, and a slight scalp wound on the left side of the head near the center of the parietal bone. Amputation of both legs was decided upon, as the only means of affording any hope of recovery. Assisted by Drs. C. Cushing and E. Lee Jones, I proceeded to operate an hour and a half after the occurrence. The patient having been thoroughly put under the effects of chloroform, a piece of rubber tubing half an inch in diameter was wound around the left leg, commencing as near as possible to the mangled portion. Each turn was drawn as tightly as the strength of the operator admitted until the entire length, eight feet, was utilized—the end being firmly held while an assistant unwound the other extremity to within three or four turns of the superior termi-

nation, where it was wrapped for the purpose of carrying the compression farther and securing the ends by a knot. We were obliged to adopt this course, for the reasons that no suitable elastic webbing could be procured, and a longer piece of tubing was not at hand. The amputation of the left leg midway between the ankle and knee was effected without the loss of a teaspoonful of blood, nor was there the least oozing until after the ligation of the principal arteries, when the tubing was removed for the purpose of discovering any small vessels needing ligation or torsion. There was still no bleeding whatever, but, on loosening the tourniquet, a small muscular branch was discovered and secured without the loss of a drachm of blood. On the removal of the tourniquet there was a flow of venous blood not exceeding an ounce and a half. Before closing the flaps, I operated upon the right leg, the tubing having been similarly applied as before. I removed it just above the malleoli, that being the lowest point where a flap could be obtained. In this operation, from first to last, there was not thirty drops of blood lost.

From the result in this case, I can readily understand that an operation for necrosis on the knee joint—in fact, any case in which the elastic bandage can be applied according to the plan laid down by Esmaïch and others—can be performed without the loss of even twenty drops of blood. The patient lived twenty-eight hours from the receipt of his injuries, and I think it not unlikely he would have died on the table, had this means of control over the blood vessels not been used.





CONTRIBUTION TO THE MEDICAL BOTANY OF CALIFORNIA.

BY W. P. GIBBONS, M. D., OF ALAMEDA,
CHAIRMAN OF THE COMMITTEE ON INDIGENOUS BOTANY.

GRINDELIA—WILLD.

NATURAL ORDER, *Compositæ*; LINNÆAN SYSTEM, *Syngenesia superflua*—Heads, many-flowered; the ray flowers generally present, pistillate, the ligule elongated; disk flowers, perfect. Corolla tubular-funnel-shaped, five-toothed. Involucre subglobose or hemispherical, the scales imbricated in many rows, often with squarrose tips. Receptacle, naked, flat, foveolate. Style, with lanceolate hispid appendages, as long as the stigmatic portion. Achenium, smooth, oblong, or ovate; somewhat angled. Pappus of 2-8 smooth rigid deciduous awns, shorter than the disk corollas—biennial (?) perennial or suffruticose, often resiniferous. Mexican and North American plants: leaves entire or serrate, often punctate; the cauline ones sessile; heads corymbed at the ends of the branches or solitary; mostly rather large.

G. robusta (Nutt.)—Very glabrous; stem herbaceous; leaves oblong, very obtuse, coarsely serrate, cordate clasping. Involucre leafy at the base, the scales produced into recurved-squarrose, subulate linear appendages; pappus of two (or more ?) bristles. *Nutt. Trans. Am. Ph. Soc., N. S. 7, p. 314.*

This plant is found on salt marshes along the Pacific Coast—in some localities very abundant. It is a robust species from one and one half to three feet high; glabrous, suffruticose, with

numerous stems from creeping roots, loosely corymbose-branched above; leaves one half to two inches broad, one and one half to five inches long, somewhat oblong-spatulate, clasping, mostly obtuse, serrate-mucronate; involucre sometimes leafy at the base; the scales produced into recurved-squarrose, subulate-linear appendages; the same as in other species; heads large, one half to three quarter inch diameter, disk at first filled with a white resinous spurm or varnish secreted by the involucre, which covers the rays and florets as they expand; pappus from two to four bristles.

I have given a full record of the description of this plant, as contained in Torrey & Gray's N. A. Botany, p. 247, and subjoined thereto a description of that which California botanists accept as the same plant. Although allowances must be made for specific variations dependent on climate and locality; yet no person could recognize the *G. robusta*, as it grows on our salt marshes, by Nuttall's description, and, in order to avoid confusion, it is better to correct the description than to change the name of the species.

About the middle of April or the first of May (the time when the flowers begin to force open the involucre) a white resinous substance begins to exude from glands which cover the scales. This resin rarely, if ever, is found in quantity on the branchlets, although there is always sufficient secreted by the stem and leaves to impart a glutinous property, perceptible to the touch. The resinous secretion changes to a brown color later in the season, and covers the heads like a thick varnish. The proper time to gather the plant is when the seeds are perfected. The officinal portions are the heads, branchlets, and the leaves about the involucre.

MEDICAL HISTORY.—Among the old Spanish residents of California, *Grindelia* enjoyed a high reputation as a specific in asthma and bronchial affections. It was not, however, brought prominently before the medical profession till 1866, when a notice appeared in the *Pacific Medical and Surgical Journal* detailing the result of its trial by Dr. W. O. Ayres, of San Francisco, on a patient who had suffered for six years so severely from asthma that he was not only obliged to abandon all active duties as a minister, but was so reduced in health that no prospect of recovery was apparent.

CASE No. 1.

For a long time he generally passed the night in his chair, with the torture usually incident to his disorder. At this juncture a friend sent him a bottle of Syrup of Grindelia, assuring him that a number of other persons affected with asthma had been cured or relieved by its use. Dr. Ayres permitted its use as an experiment, and, the patient taking a wine-glassful on going to bed, slept soundly during the night for the first time during several months. He continued the medicine regularly for four months with the same results, when a slight return of the disease occurred, incident on unusual fatigue and exposure. Thus, for an entire year, he enjoyed comparative comfort. The sequel of the case is not recorded, but I understand the disease subsequently returned and that the medicine failed in producing its former good results.

The publication of this case excited considerable interest among California physicians, and Grindelia was sought for and administered in numerous cases of asthma. I have been unable to collect any record of these cases, but the conclusion is that its use was not followed by satisfactory results, inasmuch as the remedy was discarded and forgotten in a short time.

In 1868 I commenced the labor of compiling a Medical Botany of the Pacific coast. The history of the Grindelia being fresh in memory, I visited the drug stores in San Francisco, in only one of which I found it. The whole plant had been gathered in an immature condition, and it had grown upon hilly land, as was manifest from its being without radical leaves; further than this it was not the *robusta*. The only preparation in the market was a fluid alcoholic extract, prepared from specimens such as just described. It thus became manifest, 1st, that the properties of the plant were not represented in this immature species; and, 2d, that an alcoholic preparation would be incompatible.

CASE No. 2.

About this time I met Dr. E. T. Barber, of Eureka, who reported to me a severe case of asthma, of several years standing, which routine remedies had failed to relieve. He administered the Syrup of Grindelia, combined with iodide of potassium, and

continued its use for several days. The paroxysms disappeared and for eighteen months there had been no recurrence of them.

CASE No. 3.

Soon after, I was called in the night to J. B., who had suffered several years from asthma—violent and alarming paroxysms recurring about every fortnight. He was so alarmed at the unusual severity of this attack, that he concluded to abandon his son-in-law as his physician. He would not permit me to leave his bedside for two hours, when the paroxysm began to abate. Next day, I prepared him a bottle of *Grindelia* in strong infusion, of which he took four ounces a day. This was six years ago, and he has had no return of the disease.

CASE No. 4.

The next case was a lad, H. B., 12 years of age, who had been suffering from asthma for three or four days. He was subject to periodical attacks. I administered half an ounce of the strong infusion, to be repeated every two or three hours. The first dose gave him relief in a few minutes. This was three years ago. Since then he has had two other attacks, both of which were relieved as promptly as the first.

CASE No. 5.

A. T., a child 10 years old, of strumous habit, was attacked severely by asthma about two years ago. She had been subject to frequent paroxysms, which her mother mistook for croup and had administered remedies therefor. I prescribed *Grindelia* infusion once in four hours. The second dose relieved her completely. Last year she had another paroxysm, which disappeared after the second dose. During March, 1874, she had another, which was unusually distressing. Half an ounce of the infusion once in two hours relieved her completely after the third dose.

CASE No. 6.

In December, 1871, I was called to I. L., æt. about 30. For years past he had been subject for nearly six months of the year to violent paroxysms of asthma, which would recur every

night about bedtime. He had removed from San Francisco to Alameda in hopes that a change of climate would be beneficial, but no favorable results had thus far been realized. I found him suffering from great dyspnœa; he had frequent coughs, and was expectorating bloody mucus; this condition of his system was the sequel of a severe cold of about ten days' standing. The pneumonia yielded to treatment by sub-acetate of lead alternated every two or three days with aromatic sulph. acid, but as soon as the hemorrhage ceased, his usual paroxysms of asthma returned. I gave him *Grindelia*, without any good effects. He slowly recovered his normal condition of health and resumed business, still a victim to his distressing complaint. In December, 1872, he had another attack similar to the first, but not so threatening, from which he slowly recovered; but nothing which I prescribed relieved his asthma. In September, 1873, he again took a severe cold, which was succeeded by cough and bloody expectoration. This attack was lighter than the others, and as soon as his paroxysms of asthma returned, I gave him 2 grs. of ext. *Grindelia* combined with half a grain of ext. stramonium once in four hours. The second pill was followed by emesis, by which a considerable quantity of tough, transparent, granular mucus was thrown up, following which, material relief from the asthma was experienced. The pills were continued twice a day for several days, and marked alleviation of his ordinary symptoms was experienced. On account of the unpleasant effects produced by the stramonium, he shortly afterward abandoned the use of the pills, and relapsed into his old habits. In October, '73, he was threatened with another attack of sickness, and I immediately prescribed the syr. of *Grindelia* combined with ext. stramonium in the proportion of one grain of the first to one-fourth of a grain of stramonium. This proportion appeared to answer the indications; he was confined to the house for two or three days, and resumed his duties without any material inconvenience. Since that time he has been taking this prescription for three or four days in each month, and although catarrhal and bronchial affections have been very severe and persistent during the past winter, he has enjoyed greater immunity from severe attacks of asthma, and more robust health, than for six or eight years past. On the whole, this case, complicated as it is with disease of the lungs,

so that recovery cannot be expected, is materially benefited by the use of *Grindelia*, not so much by relieving the spasms of the bronchiæ, as by arresting fresh attacks of bronchitis before its inflammatory action extends to the small ramifications of the air tubes.

CASE No. 7.

I. McG. recently arrived in California; subject from childhood to hurried respiration after active exertion, and to copious expectoration of opaque mucus; caught fresh cold before landing from the cars; has considerable dyspnœa, with prolonged and wheezing expiration, which can be heard six feet distant; constant, short cough with but little expectoration. I regard this as a case of chronic bronchitis, in which the diameter of the small tubes have been permanently contracted; a fresh cold supervening produced the asthmatic symptoms which were so conspicuous. In this case I prescribed the *grindelia* syrup in combination with about 5 grs. of bromide of ammonium, to be taken four times a day. Three days after, the wheezing had subsided, and the prolonged expiration was heard only on close proximity; the cough had nearly left, and expectoration was copious, but easy. In three weeks after, he returned home, feeling better than he had for several months past.

CASE No. 8.

Dr. E. F. Colsey of Columbia, Ga., has suffered for years from asthma, for the relief of which he had exhausted all known remedies. He wrote to me in November last with a request to send him some *Grindelia*, as a last resort, which I did. I received a reply dated January 15th, 1874. Extracts from this letter will be all sufficient: "I have had several opportunities to give the *Grindelia* a trial, in every one of which, where there has been sufficient time, its effect has been truly wonderful." "I want you to send me a pound of the extract as prepared by yourself." "Do not neglect or delay this, as I am entirely out and I feel at a loss without it—indeed, in my own case, I am so dependent upon it that I am nervous at the thought of not having it. It is the most *prompt* and stimulating expectorant I have ever used."

This concludes my present record of eight distinct cases, with

four or five subsequent attacks in two of them, in which this remedy has had a fair trial. On the other hand, Dr. Van Wyck, of Oakland, administered it to a severe case without benefit, and from several others to whom the remedy was sent, no information has yet been received.

It will be perceived that there are two or more distinct forms of asthma represented in these cases. Nos. 2, 3, 4, 5, and 8 are purely spasmodic; No. 1 was probably complicated with pulmonary disease; No. 6 is hopelessly so complicated, and No. 7 is the result of chronic bronchitis. In all of them, except Dr. Barber's case and in cases 6 and 7, the *Grindelia* was prescribed, uncombined with any other remedy. The object of this was to obtain a proximate idea of its true therapeutic value. This accomplished, it may be frequently advantageous to obtain the action of alteratives or sedatives in combination with it. Thus, minute doses of calomel, in many cases, will add to its expectorant property; iodide of potassium will promote constitutional results; bromide of ammonium is especially useful in allaying laryngeal irritability after the lungs are relieved from mucus secretions. The good judgment of the physician will perceive the indications to be answered, other than those pertaining to the remedy itself.

But these cases do not conclude the record of trial. Reasoning from its known effects as an expectorant and anti-spasmodic, last year I used it, first in one case, subsequently in six others, of pertussis. I am not conscious that it had any effect in curtailing the duration of the disease, but its prompt action as an emetic, without producing the distressing nausea incident to most other emetics, was really remarkable. After emesis was produced, its administration in smaller doses arrested the secretion of mucus and the paroxysms of coughing were comparatively light. I was so well satisfied of its useful action in the first case that I used it in all the others as the specific treatment. Subsequently, in unnumbered cases of influenza and bronchial catarrh and bronchitis, accompanied with distressing cough, its value has been clearly demonstrated.

In all the cases here presented I gathered the herb and prepared the extract, not wishing any doubt to hang over the species of the plant used or the preparation of the remedy.

The mode of preparing the extract, or of making the infusion,

should here be stated. The extract is prepared by exhausting the officinal portion of the plant of its resin and other soluble ingredients by digesting in water, containing about one ounce of borate of soda to three pints of liquid, and subjecting it to pressure; repeating the operation, straining the liquid through flannel, and evaporating to the proper consistence. To make the infusion, 4 ozs. of the heads and terminal leaves are put in two pints of water, in which has been dissolved *zj* of borate of soda.

Should any member of the profession wish to try this remedy on any cases now under treatment, Mr. Mack Webber, corner of Broadway and Eleventh streets, in Oakland, will take pleasure in furnishing them with small packages of the extract, prepared with the formula which I have adopted. All that is asked in return is to be presented with a history of the cases where trial has been made, whether with favorable results or otherwise.





POLYPI OF THE UTERUS.

By WASHINGTON AYER, M. D., OF SAN FRANCISCO.

In calling your attention to the very interesting and important subject of the polypus uteri, I do not aim to present anything new upon the cause and pathology of this class of tumors, but rather hope to refresh your memory with the well-established facts of their growth, the mode of attachment, the symptoms, diagnosis and methods of removal.

Generally, these morbid productions do not differ so much from other fibrous tumors in structure as they do in situation, form and manner of receiving nutrition, which is through a pedicle attached to some part of the womb, and which is much smaller than the body of the tumor. And, while it does not fall to the lot of every physician to meet with this tumor in private practice, it is of much more frequent occurrence than is generally suspected, and at times grows to a very great size. It maintains its organized existence and growth at the expense of the whole system, and not unfrequently occasions the most alarming floodings and prostration. One mentioned by Dr. Churchill was excised, at the Meath Hospital, fourteen inches long and five in diameter. Different authors speak of the tumor as large as a "child's head," which is but little more definite than it would be to say it was as large as an "onion" or a "turnip;" however, it is sufficient, practically, to know it sometimes grows very large, and that it presents different appearances—as fibrous, cellular and glandular.

The peculiarities of this tumor, according to Boivin, Brochet and Duges, are that it varies in density in different parts of the same tumor, "that it is sometimes hollow, either empty or con-

taining grumous blood, or gelatinous matter, or hair, or fat with hair."

The cause of this morbid growth within the sacred receptacle of primal human organization, is so veiled by the unrevealed laws of nature from ocular and experimental observation, that we can say no more than it is the result of some disturbance in the evolution of the functions of organic life, and then leave the inquiry for farther research in the walks of science. And yet, who can say that the coruscation from some bright intellect will not bring this subject to our ready comprehension?

No condition in the life of woman seems to be exempt from these mischievous intrusions upon her comfort; for the rich and poor, the married and unmarried, the old and young, are subject to these enemies of her health and happiness.

The presence of a polypus in the womb is not indicated at first by any distinct diagnostic symptoms; the rational symptoms being such as mark a variety of uterine disturbances—hemorrhage at irregular intervals being the most prominent. The blood is sometimes in a fluid state and sometimes in clots, and when retained long in the vagina becomes quite offensive, and this condition may, and probably does often lead to a wrong diagnosis, and possibly the testimony of the medical expert upon this subject may settle some vexed and important question of criminal law or medical jurisprudence. When the blood passes off in clots, in a state of partial decomposition, with offensive odor, the medical attendant should be extremely cautious in giving his opinion, whatever may be his suspicions, lest he should wrongfully question the virtue or fidelity of his patient, and bring upon the innocent unmerited censure and much sorrow; for it is reasonable to presume that a polypus may be detached and thrown off by the contraction of the womb, *per se*, and be removed by the attendants unobserved.

Being called to the bedside of a woman who is flooding, it is the first duty of the physician, *if possible*, to learn the cause. I say *if possible*, for it is well known to all practitioners in large cities in these days of modern civilization, or, more properly, in these days of so-called *fashionable life*, that the marital ties are not so well observed in all cases as in other days, and many resort to illicit means to conceal the foreshadowed shame of an illicit indulgence of their passions, and will endeavor, and per-

haps succeed, in deceiving the kind-hearted physician who is called to give relief. Hence he finds a contest going on to decide between his suspicions and the real facts in the case.

The nature and manner of making an examination and the diagnosis are so well described by all our authors upon this subject, that I will not trespass upon your time to repeat them. In making a differential diagnosis, some difficulty may be encountered if an encysted hydatid be the cause of the trouble, and more especially if it be acted upon by the continuous contraction of the womb.

I will give the following as an example: About the 20th of December, 1873, I was called to Mrs. R— Y—, aged forty-five, the mother of one child, thirteen years old. Has had two miscarriages; during the past five years has been irregular, flooding at intervals of two to five months, but during the five months previous to calling me in, "had seen nothing," but had continued to increase in size from month to month, *pari passu*, as in pregnancy. At this time I found her flooding, very much prostrated and suffering with a constant "bearing down pain." On making examination, I found the os uteri slightly dilated, very rigid, and could distinctly feel a firm, unyielding tumor, with smooth surface. On turning the body, my patient complained of a motion similar to that of a child *in utero*, but assured me she could not be pregnant.

I then learned that previous to the present flooding there had been a profuse flow of water from the womb, and decided I had a large hydatid tumor to contend with. I applied a tampon of lint, saturated with a solution of alum, and ordered the following: R—Opii gr. vi; Plumb Acet. gr. xx; M. ft. chart. no vi.; one to be given every three hours, and the next morning called Dr. H. H. Hubbard to see the case with me. Being fully satisfied with the correctness of our opinion, I returned in the evening, and with a small uterine sound punctured the sac, when a large quantity of fluid passed off and the hemorrhage nearly ceased, the womb became relaxed and the mouth soft. I then ordered Battley's liq. secale cornut, to be given in half drachm doses every two hours, and also stimulants, to guard against a return of the hemorrhage—the sac being still retained. The next morning she told me, while being helped upon the chamber, she was seized with "violent cramps," and something came away in the

vessel, which I found to be a membranous sac large enough to cover a quart bowl, and from that time she began to improve, and is now in the fullest enjoyment of health.

Having learned that a polypus is in the womb, it is a matter of great importance to know how and be able to remove it. If it be very small, it may be removed by torsion, but if it has attained any considerable size, the safest procedure is to ligate, for there is great difficulty in removing a tumor from the womb in its unrelaxed condition, and also great danger of causing subsequent inflammation, which may result fatally.

The best instruments for the operation are Gooch's and Buchanan's double canula, and not much advantage given to either. If the attachment is at the fundus uteri, both tubes, being armed with a ligature, should be held firmly together and passed over the tumor as near the pedicle as possible, then separated and joined together underneath, and the ligature tightened. But if the pedicle is on the right side, the left tube should be held firmly, and the right brought round to meet it, and *vice versa* if on the left side. Should the patient be nearly exhausted from the loss of blood, do not consider the immediate removal of the tumor is necessary to secure safety, for too great haste might be attended with fatal results; but carefully pass the ligature around the pedicle, and when it is securely tightened you will be pleased to find the hemorrhage has ceased. Then you can continue your stimulants and nourishment, and afford to wait, and let your patient gain courage and strength by the force of your example.

But do not leave your patient too soon, nor feel your responsibility is over when the ligature is applied, for when reaction takes place you will have a high fever to control, and must carefully watch for the first symptoms of metritis, and be prompt with remedies for relief. After suppuration commences keep the vagina cleansed with a little warm water and liq. soda chlo. or potas permang. The time required for a complete separation will depend upon the size of the pedicle, and will vary from forty to seventy hours. When detached there will be but little difficulty in its removal, by fastening a hook firmly to it, as the womb will be relaxed and offer no great resistance.

I have the notes of a case before me, upon which I operated just one year ago, to which I will briefly invite your attention,

as it shows the importance of a correct diagnosis, and points out the advantage one physician may have sometimes over another of equal professional ability, by seeing a case in a more advanced state of development. And here I would state that no error of an expressed opinion of another should be mentioned to his prejudice, for the purpose of securing the greater favor of the patient or any other parties, and I trust I shall not be misunderstood in what I may say; for I hold it a cardinal principle in medical ethics not to make invidious comparisons of the brethren in the profession, and this, I am sure, all honorable gentlemen will never forget or allow to be violated without remonstrance.

On the 4th of April, 1873, I was called to see Mrs. D., of Nevada, who had come to the city for medical treatment. Her age was thirty-three; the mother of two children; had one miscarriage, and had not been well since; had been suffering with flooding at irregular periods for nearly three years; had consulted all the doctors at home; some one of the best physicians in Sacramento, and been twice before to San Francisco and consulted two of the most prominent surgeons here, but no one seemed to know what was the matter, and she was growing worse all the time.

Now, gentlemen, during this visit I did not discover that she had a polypus, nor did I make an exhaustive examination, for personal reasons, but I did suspect its presence, and so informed her husband. At my next visit I dilated the os, and discovered a tumor, which appeared as large as the head of a child at full period of gestation.

On the morning of April seventh I was summoned hurriedly to her bedside, and found her nearly exhausted from the loss of blood—the mouth of the womb was open nearly one inch. Regarding that as a favorable opportunity, I decided to ligate the tumor without delay. I called in Drs. David Wooster and A. S. Baldwin, to whom I am indebted for valuable assistance. I found the tumor attached to the fundus, and firmly applied the ligature to the pedicle, and had the satisfaction to find the flooding cease. I ordered stimulants and supporting treatment. At 10 p. m. reaction set in, with high fever; tongue coated and tenderness over the womb. Present treatment was suspended and the following given: R—Opii, grs. vi; quinine sulph., grs.

xx; fiat chart. mitte no vi, one to be given every four hours. R—Ol terebinth, ol oliva, of each ʒii ; rub over bowels freely.

2 P. M.—More comfortable—had slept three hours. Considerable offensive discharge from the womb; ordered warm water injection, with liq. soda chlo.

April ninth—7 A. M.—Rested comfortably; less tenderness; discharge increased; nausea; pulse feeble; tongue coated white; tightened ligature and continued wash. R—Quina sulph., ʒss ; acid sulph. dil., ʒi ; syr. limon, ʒi ; aqua distillat, ʒiii ; one tablespoonful every four hours, with same quantity of port wine, and beef tea freely. 2 P. M.—Some improvement. 7 P. M.—Continue treatment of previous day through night; apply linament freely over the abdomen.

April tenth—Much depressed; passed a sleepless night; hands and feet cold; pulse very feeble; tongue pale and slimy. Tightened ligature, and by using tension separated the tumor from its pedicle, about sixty-six hours after ligating; and with a hook was able to remove it; washed the vagina with warm water, and gave stimulants freely and supporting treatment. The tumor measured four and one half inches from the pedicle to the base, and three inches in diameter. The pedicle was nearly one inch in thickness. 9 P. M.—Very comfortable, and urinates without difficulty. From this time continued to improve, and on the sixteenth sat up to have the bed made, and ten days after the operation was completed she was on the street; and, I am told, has not been sick one day since; she menstruates regularly and is in the full enjoyment of health.*

* NOTE.—While the operation with the double canula may be considered by some of the most eminent professional gentlemen "bungling," "clumsy," etc., certainly it has its advantages over the *ecraseur* in the greater facility with which it can be applied and the less liability of implicating any of the depressed portion of the womb with the pedunculated attachment. The same objection is offered to the use of the scissors. It is very true the operation by ligation is *slow*, but in a large majority of cases the farther operation of making bilateral incisions through the *os tince* is avoided, and these incisions are sometimes attended with grave and serious results to the patient, yet in the experience of Dr. Sims such has not been the case. But within the past few months I have been consulted in the case of a lady from San Diego, California, who some time ago submitted to this operation, when the edges of the incisions were healed without uniting, giving the neck of the womb a lengthened nodulated appearance, thus causing her great suffering without the *poor satisfaction* of knowing she had some disease. Drs. Atlee, Peaslee, and Sims seem greatly to prefer the enucleator with the vulsellum, and they are the highest authority in the country. But with these instruments I have had no experience. I have an instrument which I have had made, with which I have operated four times successfully, but as it involves no new principal it is not likely to come into general use.



CONSTITUTION AND BY-LAWS OF THE SOCIETY.

ARTICLE I.

TITLE OF THE SOCIETY.

SECTION 1. This institution shall be styled "THE MEDICAL SOCIETY OF THE STATE OF CALIFORNIA."

ARTICLE II.

MEMBERS.

SECTION 1. The members of this society shall consist of delegates from permanently organized local medical societies, ordinary and honorary members, who shall collectively represent and have cognizance of the common interests of the medical profession in the State of California.

SEC. 2. Each delegate from a local society shall hold his appointment for one year, until another is appointed to succeed him, and shall participate in all the business and affairs of the society on paying the usual dues of five dollars.

SEC. 3. Each local society shall have the privilege of sending to this society one delegate for every five of its regular resident members, and one for every additional fraction of more than one half that number of its members.

SEC. 4. *Qualifications for membership* shall consist of a good primary and medical education, attested by a diploma from some known medical school in good repute, and a good professional and moral standing in the community in which such candidate may reside.

Ordinary Members.—Every physician who shall properly satisfy the Board of Censors that he possesses the necessary qualifications as prescribed, may become an ordinary member of this society; and all those who may hereafter serve in the capacity of delegates to the society, together with such other persons as

may receive the appointment by unanimous vote, shall be entitled to permanent membership; *provided*, that no physician shall be considered eligible to membership who may reside within any location where there is a local medical society, and who has failed to become a member thereof, unless there be some special reason assigned for his election.

SEC. 5. *Honorary Members* shall consist of such distinguished savants and others as may be deemed worthy of the compliment. They shall receive their appointment by a vote of the society, and upon a motion of some member present.

SEC. 6. Each individual, prior to taking his seat as a member of the society, must sign the Constitution, inscribing his name and address in full, specifying in what capacity he attends, and, if a delegate, the local society which he represents. Every member shall be entitled to the diploma of the society, to which the seal* of the society shall be attached, and the signatures of all the officers.

SEC. 7. The seal of this society shall always be kept by the Permanent Secretary.

ARTICLE III.

OFFICERS.

SECTION 1. The officers of the society shall be President, four Vice Presidents, one Permanent and two Assistant Secretaries, a Treasurer, and a Board of Censors of five members. These officers shall be nominated by a committee of one member from each county represented, on the morning of the second day of meeting, and be elected by ballot. Each officer shall hold his appointment for one year, and until another is elected to succeed him.

SEC. 2. The *President* shall preside at the meeting, preserve order, give a casting vote in case of a tie, and perform all other

*The seal that has been adopted shows enough of the beautiful design of the seal of the State to declare the common origin of the Medical Society and of the State of California, while the cock, that was wont to be sacrificed to Esculapius, representing "vigilance," is crowing out 1870, the year of reorganization; and the serpent, emblematic of "sagacity and long life," lies entwined around the doctor's staff at his feet. Thus, *vigilance* and *sagacity* typify the qualities a physician should possess under the direction of Minerva.

duties that custom and parliamentary usage may require. He shall organize and open the meeting next succeeding his election by an address on some subject connected with medicine, or with the interests of the society. He shall also fill, by appointment, all vacancies that may occur from death or other causes.

SEC. 3. The *Vice Presidents*, when called upon, shall assist the President in the performance of his duties, and, during his absence, or at the request of the President, one of them shall officiate in his place.

SEC. 4. The *Permanent Secretary* shall reside in Sacramento, and shall authenticate the proceedings; give due notice of time of next meeting; shall serve as member of Committee on Publication; shall preserve the archives and unpublished transactions of the society; shall hold correspondence with other permanently organized societies, both domestic and foreign, and see that all the published transactions are promptly distributed to all the members entitled to receive them.

SEC. 5. The *Assistant Secretaries* shall record the minutes, notify members of committees of their appointment, and of the duties assigned them; and, in the absence of the Permanent Secretary, one of them shall perform his duties.

SEC. 6. The *Treasurer* shall have immediate charge and management of the funds as a property of the society, and hold them subject to the disposal of the society. At each annual meeting he shall present a report, setting forth the amount of moneys received, as well as the amount disbursed, and for what purposes.

SEC. 7. The *Board of Censors* shall examine the credentials of all candidates for admission to the society, and if such credentials are found to conform with the requirements, as enacted in Article II of this Constitution, the Board of Censors shall recommend said applicants to the society as suitable candidates for election.

ARTICLE IV.

MEETINGS.

SECTION 1. The regular meetings of the society shall be held annually, and commence on the third Wednesday of April.

ARTICLE V.

STANDING COMMITTEES.

SECTION 1. The following Standing Committees, each composed of five members, of whom the first named is Chairman, shall be nominated at every annual meeting by the President elect, for the purpose of preparing and arranging business for each ensuing year, and for carrying into effect the orders of the society not otherwise assigned, namely :

On Practical Medicine and Medical Literature ;

On Surgery ;

On Obstetrics ;

On Medical Topography, Meteorology, Endemics, and Epidemics ;

On Indigenous Botany and the Domestic Adulteration of Drugs ;

On Public Hygiene and State Medicine ;

On Histology and Microscopy ;

On Mental Diseases and Medical Jurisprudence ;

On Medical Education ;

On Publication ;

Of Arrangements ;

On Prize Essays.

SEC. 2. The *Committee on Practical Medicine and Medical Literature* shall prepare an annual report on the more important improvements effected in this State in the management of individual diseases ; the improvements and discoveries which may have been made in Anatomy, Physiology, General Pathology, Therapeutics, and Medical Jurisprudence.

SEC. 3. The *Committee on Surgery* shall prepare an annual report on all the important improvements in the management of surgical diseases effected in the State during the year, and, as far as can be ascertained, the number of capital operations performed, with their results.

SEC. 4. The *Committee on Obstetrics* shall prepare an annual report on the important improvements in the obstetrical art, and in the management of the diseases peculiar to women and children, effected in the State during the year, together with such remarks touching these subjects as they may think proper.

SEC. 5. The *Committee on Medical Topography, Meteorology, Endemics, and Epidemics*, shall prepare an annual report on the peculiarity of the soil and climate of the different sections of the State, with the diseases to which they are subject; also, the endemics and epidemics which have prevailed throughout the State during the year.

SEC. 6. The *Committee on Indigenous Botany and the Domestic Adulteration of Drugs* shall prepare an annual report on the indigenous medical botany of the State of California, paying particular attention to such plants as are found to possess valuable medicinal qualities, and are not accurately described in standard works, with the localities where they are to be found. Also, to report on the quality of drugs brought to our market with the view to correct the evils arising from the extensive introduction and sale of spurious and sophisticated articles.

SEC. 7. The *Committee on Public Hygiene and State Medicine* shall prepare an annual report on all subjects germane to this important branch of medical science.

SEC. 8. The *Committee on Histology and Microscopy* shall report and demonstrate such valuable facts and discoveries annually, bearing directly or indirectly on medicine and surgery, as they may think proper.

SEC. 9. *Committee on Mental Diseases and Medical Jurisprudence*. This Committee shall report on all psychological questions, and on such matters appertaining to medical jurisprudence as in their judgement may be deemed advisable.

SEC. 10. The *Committee on Medical Education* shall prepare an annual report on the general condition of medical education in the State of California, as compared with the state of medical education in other States of the Union, noticing the several medical institutions of the State, their course of instruction, the practical requirements for graduation, the modes of examination for conferring degrees, and the reputed number of pupils and graduates at each during the year; together with such other matters as they may deem worthy of consideration in reference to medical education and the reputable standing of the profession.

SEC. 11. The *Committee on Publication*—of which the Per-

manent Secretary must constitute a part—shall have charge of preparing for the press, and of publishing and distributing, such of the proceedings, transactions, and memoirs of the society, as may be deemed worthy to be published.

SEC. 12. The *Committee of Arrangements* shall be composed of members residing in the place at which the society is to hold its annual meeting, and shall be required to provide suitable accommodations for the meeting, to report on the credentials for membership, and to receive and announce all voluntary communications made to the society.

SEC. 13. In order to afford the Committees on Medical Topography, Meteorology, Endemics, and Epidemics, and on Indigenous Botany and the Domestic Adulteration of Drugs, material for their several annual reports, it shall be the duty of the several auxiliary societies in the State to transmit to the Chairman of these respective committees, on or before the first day of March of each year, a special report, embracing such information touching their particular localities as may enable said committees to make full reports on all the subjects committed to them.

ARTICLE VI.

VOLUNTARY CONTRIBUTIONS.

SECTION 1. After the reading and discussion of the annual reports, or at any other period during the meeting of the society, by the vote of two thirds of the members present, it shall be the privilege of any member to present to the consideration of the society, either orally or in writing, communications on medical subjects, reports of interesting cases, or such other matters as may be deemed of interest to the profession; which communications may, on motion, be referred to the Committee on Publication, and, if deemed by them worthy of preservation, shall appear among the proceedings.

ARTICLE VII.

FUNDS AND APPROPRIATIONS.

SECTION 1. The funds of the society shall be raised by

individual voluntary contributions, by the sale of its publications, and by an annual tax of five dollars on each member of the society, on the payment of which he shall be entitled to a copy of all the publications for the year.

SEC. 2. The funds thus raised may be appropriated for defraying the expenses of the annual meetings; for publishing the proceedings, memoirs, and transactions of the society; for enabling the standing committees to fulfill their respective duties, conduct their correspondence, and procure the material for the completion of their stated annual reports; for the encouragement of scientific investigations by prizes and awards of merit; and for such other purposes as the society may from time to time direct.

ARTICLE VIII.

DELEGATES TO THE NATIONAL MEDICAL ASSOCIATION.

SECTION 1. The society shall annually appoint, to represent it in the American Medical Association, one delegate for every ten members, and one for every additional fraction of more than half this number, whose certificates of appointment shall be signed and duly authenticated by the President and Secretary.

ARTICLE IX.

CODE OF ETHICS.

SECTION 1. The Code of Medical Ethics recommended by the National Medical Association, held in Philadelphia in May, 1847, having been approved and adopted by this society, shall have the full force and effect of any Article of this Constitution.

ARTICLE X.

DISCIPLINE OF MEMBERS.

SECTION 1. Any violation of the provisions of the Constitution or of the Code of Ethics adopted by this society, shall be referred to the Board of Censors for adjudication, from whose decision an appeal may be taken to the society. Such violation being reported by the Board of Censors to the society, and

established to the satisfaction of a majority of the members, the individual or individuals thus offending shall be excommunicated, and deprived of all the privileges of membership.

SEC. 2. The society shall also have jurisdiction in all cases of appeals taken from auxiliary societies, in which event their decision shall be final.

ARTICLE XI.

AMENDMENTS AND ALTERATIONS.

SECTION 1. No amendment nor alteration shall be made in any of the Articles of this Constitution, except at the annual meeting next subsequent to that at which such alteration or amendment may have been proposed, and then only by the concurrence of two thirds of the members in attendance.

ORDER OF BUSINESS.

The following order of business is presented as a by-law of the society, which shall at all times be subject to a vote of a majority of all the members in attendance, and, except temporarily suspended, shall be as follows :

- I. Organization of meeting.
- II. Report of the Committee of Arrangements on the credentials of members after the latter have registered their names and addresses, etc.
- III. The calling of the roll.
- IV. The reception of members not present at the opening of the meeting, and the reading of notes from absentees.
- V. Reception of members by invitation.
- VI. The reading and consideration of the stated annual reports from the standing committees.
- VII. Reading and discussion of voluntary contributions.
- VIII. The election of officers and place of annual meeting, and appointments by the President elect to fill the standing committees.

- IX. Resolutions introducing new business, and instructions to the standing committees.
- X. Unfinished and miscellaneous business.
- XI. Reading of the minutes of the session about to conclude.
- XII. Adjournment.





STANDING COMMITTEES

OF THE STATE MEDICAL SOCIETY FOR 1874-5.

Practical Medicine—W. R. Cluness, Sacramento, Chairman ; H. A. Dubois, San Rafael ; S. D. Campbell, Suisun ; C. M. Fenn, San Diego ; J. P. Mooklar, San Francisco.

Surgery—H. H. Toland, San Francisco, Chairman ; C. B. Brigham, San Francisco ; E. B. Robertson, San Andreas ; G. W. Dutton, Tomales ; W. F. Smith, San Francisco.

Obstetrics—A. E. Regensberger, San Francisco, Chairman ; W. Ayer, San Francisco ; C. Cushing, Alameda ; I. E. Oatman, Sacramento ; J. F. Wayland, Chico.

Medical Topography, etc.—F. W. Todd, Stockton, Chairman ; Chas. Blach, San Francisco ; H. L. Orme, Los Angeles ; Josiah Crane, Petaluma ; C. E. Holbrook, Martinez.

Indigenous Botany, etc.—W. P. Gibbons, Alameda, Chairman ; J. Flint, Lincoln ; H. J. Crumpton, Lakeport ; N. S. Hamlin, Yuba City ; Matt. Gardner, Davisville.

Medical Education—J. F. Morse, San Francisco, Chairman ; R. B. Cole, San Francisco ; James Simpson, San Francisco ; G. A. Shurtleff, Stockton ; G. L. Simmons, Sacramento.

Hygiene, etc.—T. M. Logan, Sacramento, Chairman ; A. B. Stout, San Francisco ; H. Gibbons, Jr., San Francisco ; Luke Robinson, Colusa ; C. S. Kittredge, Oakland.

Mental Diseases—E. Trainor, Alameda, Chairman ; E. Wilkins, Marysville ; I. S. Titus, Stockton ; Samuel McCurdy, Klamath ; A. Trafton, Woodbridge.

Histology, etc.—J. H. Wythe, San Francisco, Chairman ; E. H. Woolsey, Alameda ; Thomas Ross, Woodland ; T. M. Todd, Auburn ; E. T. Barber, Eureka.

Prize Essays—Alemby Jump, Downieville, Chairman ; R. M. Hunt, Nevada City ; J. B. Cox, Healdsburg ; M. Pietrzyzycki, Rio Vista ; E. N. Foote, Lockford.

Arrangements—F. W. Hatch, Chairman, Sacramento ; H. W. Nelson, Sacramento ; R. W. Murphy, Sacramento ; Charles Fisher, Sacramento ; T. A. Snider, Sacramento.

Publication—G. G. Tyrrell, Chairman, Sacramento ; J. F. Montgomery, Sacramento ; H. P. Babcock, Alameda ; E. B. Harris, Sacramento ; F. W. Hatch, Jr., Sacramento.





CATALOGUE OF OFFICERS AND MEMBERS
OF THE
MEDICAL SOCIETY OF THE STATE OF CALIFORNIA.

PRESIDENTS AND VICE PRESIDENTS OF THE
STATE MEDICAL SOCIETY.

1856.

SACRAMENTO.

President,

B. F. Keene, M. D..... El Dorado.

Vice Presidents,

E. S. Cooper, M. D..... San Francisco.
S. Langdon, M. D..... San Joaquin.
D. W. C. Rice, M. D..... Yuba.
R. K. Reid, M. D..... San Joaquin.
F. W. Hatch, M. D..... Sacramento.

1857.

SACRAMENTO.

President,

H. Gibbons, M. D..... San Francisco.

Vice Presidents,

R. H. McDaniels, M. D..... Yuba.
O. Harvey, M. D..... El Dorado.
A. J. Spencer, M. D..... Santa Clara.
R. B. Ellis, M. D..... Sacramento.
A. B. Stout, M. D..... San Francisco.

1858.

SAN FRANCISCO.

President,

A. B. Stout, M. D..... San Francisco.

Vice Presidents,

J. P. Whitney, M. D..... San Francisco.

C. N. Ege, M. D..... Yuba.

A. J. Spencer, M. D..... San Jose.

I. E. Oatman, M. D..... Sacramento.

J. Morrison, M. D..... San Francisco.

1859.

SACRAMENTO.

President,

R. B. Ellis, M. D..... San Francisco.

Vice Presidents,

J. F. McLane, M. D..... Yuba.

H. W. Harkness, M. D..... Sacramento.

O. Harvey, M. D..... El Dorado.

W. G. Deal, M. D..... Alameda.

J. F. Montgomery, M. D..... Sacramento.

1870.

SAN FRANCISCO.

[Reorganization of State Medical Society.]

President,

T. M. Logan, M. D..... Sacramento.

Vice Presidents,

S. R. Harris, M. D..... San Francisco.

T. H. Pinkerton, M. D..... Alameda.

J. L. Ord, M. D..... Santa Barbara.

G. A. Shurtleff, M. D.....	San Joaquin.
D. B. Hoffman, M. D.....	San Diego.

1871.

SACRAMENTO.

President,

H. Gibbons, Sr., M. D.....	San Francisco.
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Vice Presidents,

G. A. Shurtleff, M. D.....	San Joaquin.
F. W. Hatch, M. D.....	Sacramento.
F. W. Todd, M. D.....	San Joaquin.
J. F. Montgomery, M. D.....	Sacramento.

1872.

OAKLAND.

President,

G. A. Shurtleff, M. D.....	San Joaquin.
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Vice Presidents,

T. H. Pinkerton, M. D.....	Alameda.
J. J. Franklin, M. D.....	Sonora.
W. F. Cheney, M. D.....	Butte.
W. W. Hays, M. D.....	San Luis Obispo.

1873.

SACRAMENTO.

President,

T. H. Pinkerton, M. D.....	Alameda.
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Vice Presidents,

J. M. Brown, M. D.....	Solano.
C. A. Kirkpatrick, M. D.....	San Mateo.
F. W. Hatch, M. D.....	Sacramento.
H. M. Briggs, M. D.....	Santa Barbara.

OFFICERS FOR 1874-5.

SAN FRANCISCO.

President,

J. M. Brown, M. D., U. S. N..... Solano.

Vice Presidents,

A. B. Nixon, M. D..... Sacramento.

W. F. Cheney, M. D..... Butte.

Martin Baker, M. D..... Tulare.

R. K. Reid, M. D..... San Joaquin.

Permanent Secretary,

Gerard G. Tyrrell..... Sacramento.

Assistant Secretaries,

A. B. Caldwell, M. D..... Marysville.

W. F. Wythe, M. D..... San Francisco.

Treasurer,

Ira E. Oatman, M. D.. .. Sacramento.

Board of Censors,

G. G. Tyrrell, M. D..... Sacramento.

W. R. Cluness, M. D..... Sacramento.

F. W. Hatch, M. D..... Sacramento.

J. L. Asay, M. D..... Visalia.

Samuel Langdon, M. D..... Stockton.

PERMANENT MEMBERS.

Adams, J. S..... Oakland

Allen, C. H..... Centreville

Andrei, A.....

Asay, J. L..... Visalia.

Ayer, W.....	San Francisco.
Babcock, H. P.....	Oakland.
Bailey, F. E.....	Santa Cruz.
Baker, Martin.....	Visalia.
Baldwin, H. S.....	San Francisco.
Bamford, William.....	Brooklyn.
Barber, E. T.....	Eureka.
Barkan, A.....	San Francisco.
Bates, C. B.....	Santa Barbara.
Bates, C. M.....	San Francisco.
Belinge, F. A. A.....	San Francisco.
Belton, W. H.....	Colusa.
Biggs, H. M.....	Santa Barbara.
Bird, N. J.....	San Francisco.
Blach, Charles.....	San Francisco.
Blake, C. E.....	San Francisco.
Boreman, Charles.....	Jackson.
Bradbury, W. T.....	San Francisco.
Bradway, J. R.....	Oakland.
Brigham, C. B.....	San Francisco.
Brinkerhoff, S. B.....	Santa Barbara.
Brown, J. M., U. S. N.....	Vallejo.
Brown, James A.....	Sutter Creek.
Brown, J. N.....	San Jose.
Brown, William Ferris.....	Stockton.
Bryan, E. H.....	San Francisco.
Buckley, C. F.....	San Francisco.
Buffum, A. C.....	San Francisco.
Cabanis, T. T.....	Fort Jones.
Caldwell, A. B.....	Marysville.
Caldwell, A. B.....	Santa Clara.
Callaghan, J. D.....	San Francisco.
Campbell, S. D.....	Suisun.
Carman, William.....	San Francisco.
Carr, E. S.....	Oakland.
Chamberlain, P.....	San Francisco.
Chase, George C.....	Downieville.
Cheney, William Fitch.....	Chico.
Chesley, C. P.....	San Francisco.
Chismore, J.....	San Francisco.

Christie, J. B.....	Petaluma.
Clark, Asa.....	Stockton.
Clark, J. H.....	Yuba City.
Cluness, W. R.....	Sacramento.
Cole, R. Beverly.....	San Francisco.
Coleman, C. S.....	San Leandro.
Cory, A. J.....	San Jose.
Cory, Benjamin.....	San Jose.
Cox, J. B.....	Healdsburg.
Crane, J. H.....	Petaluma.
Crumpton, H. J.....	Lakeport.
Crook, John T.....	San Francisco.
Cushing, Clinton.....	Oakland.
Davidson, H. B.....	New Almaden.
Davis, G. W.....	Langwell.
Davis, H. R.....	San Francisco.
Dean, Benjamin D.....	San Francisco.
Dobbins, Thomas.....	Yuba City.
Dubois, A. S.....	Auburn.
Dubois, H. A.....	San Rafael.
Dupuytren, J. B. Pigne.....	San Francisco.
Durant, F. C.....	Folsom.
Dutton, G. W.....	Tomales.
Ellinwood, C. N.....	San Francisco.
Evans, George H.....	Dixon.
Fenn, C. M.....	San Diego.
Ferris, A. S.....	San Francisco.
Fisher, Charles.....	Sacramento.
Fiske, Henry M.....	Sutter Creek.
Flint, Joseph.....	Lincoln.
Foote, Erastus N.....	Lockford.
Fox, William Rilay.....	San Leandro.
Franklin, J. J.....	Sonora.
Gardner, John.....	Fiji.
Gardner, Mathew.....	Davisville.
Gates, H. S.....	San Francisco.
Gates, V. Bruce.....	San Francisco.
Gibbons, Henry.....	San Francisco.
Gibbons, Henry, Jr.....	San Francisco.
Gibbons, William, P.....	Alameda.

Gordon, J. B.....	Sonoma.
Graves, G. W.....	Petaluma.
Grover, W. A.....	San Francisco.
Haine, Joseph.....	San Francisco.
Hamilton, J. F....	San Francisco.
Hamlin, N. S.....	Yuba City.
Hammond, J.....	Lockford.
Hanson, Thomas C.....	Winnemucca.
Hardy, B. F.....	San Francisco.
Harris, E. B.....	Sacramento.
Harris, S. R.....	San Francisco.
Harrington, C. C.....	Marysville.
Harvey, O.....	Galt.
Harville, J. W.....	San Francisco.
Haswell, C. S.....	Sacramento.
Hatch, F. W.....	Sacramento.
Hatch, F. W., Jr.....	Sacramento.
Hays, L. W.....	San Francisco.
Hays, W. W.....	San Luis Obispo.
Hewston, George.....	San Francisco.
Hewston, John.....	San Francisco.
Hoffman, D. B.....	San Diego.
Holbrook, C. E.....	Martinez.
Holmes, Stillman.....	Oakland.
Hudson, A. T.....	Stockton.
Humphrey, P. H.....	San Francisco.
Hunt, R. M.....	Nevada.
Jackson, G. H.....	Woodland.
Johnson, W. H.....	San Francisco.
Jones, William C.....	Grass Valley.
Jump, Alemby.....	Downieville.
Keane, G. B.....	San Francisco.
Kelley, E.....	San Francisco.
Kenyon, C. G.....	San Francisco.
Kirkpatrick, C. A.....	Redwood City.
Kittredge, Charles S.....	Oakland.
Lampson, R. M.....	Chinese Camp.
Lane, L. C.....	San Francisco.
Langdon, S.....	Stockton.
Logan, Thomas M.....	Sacramento.

Lowe, I. H.....	Knight's Ferry.
Malich, G. H.....	San Francisco.
Martin, E. J.....	Castroville.
Martineau, E. D.....	San Francisco.
McCurdy, S.....	Klamath.
McDaniels, R. A.....	Marysville.
McGuire, L.....	Sacramento.
Meares, J. L.....	San Francisco.
Mehring, A. B.....	Woodland.
Montgomery, J. F.....	Sacramento.
Mooklar, J.....	San Francisco.
Morse, John F.....	San Francisco.
Murphy, J.....	San Francisco.
Murphy, R. W.....	Sacramento.
Neal, H.....	Hollister.
Neill, E. H.....	San Francisco.
Nelson, H. W.....	Sacramento.
Newmark, V.....	San Francisco.
Nichell, C. F. A.....	Napa.
Nichols, H. L.....	Sacramento.
Nixon, A. B.....	Sacramento.
Oatman, Ira E.....	Sacramento.
O'Neil, A. A.....	San Francisco.
Ord, J. L.....	Santa Barbara.
Orme, H. S.....	Los Angeles.
Pardee, E. H.....	Oakland.
Parkinson, M. C.....	Antioch.
Parrimore, E. L.....	Woodland.
Paugh, W. J.....	San Francisco.
Pelham, E.....	Shasta.
Pietrzycki, M.....	Rio Vista.
Pierson, B. H.....	Woodland.
Pike, H. G.....	Sanel.
Pinkerton, T. H.....	Oakland.
Plummer, R. H.....	San Francisco.
Powers, G. H.....	San Francisco.
Pond, M. B.....	Napa.
Price, C. E., U. S. A.....	Angel Island.
Price, Thomas.....	San Francisco.
Randle, P. W.....	San Francisco.

Ray, D.....	Woodland.
Regensberger, A. E.....	San Francisco.
Reid, R. K.....	Stockton.
Reilay, John P.....	Oakland.
Reynolds, J. W. B.....	Vacaville.
Robertson, E. B.....	San Andreas.
Robinson, Luke.....	Colusa.
Rogers, S. J. S.....	Marysville.
Ross, Thomas.....	Woodland.
Ross, W. W.....	Watsonville.
Rowell, Charles.....	San Francisco.
Rowell, Chester.....	San Francisco.
Rule, D. K.....	Napa.
Rupe, S. H.....	Healdsburg.
Russell, W. A.....	Visalia.
Sage, C. T.....	San Francisco.
Sawyer, J. J.....	Cherokee Flat.
Saxe, A. W.....	Santa Clara.
Scott, John.....	San Francisco.
Seawell, L.....	
Sharkey, James M.....	San Francisco.
Sharp, William.....	Jackson.
Sherman, Geo. E.....	Oakland.
Shurtleff, Benjamin.....	Napa.
Shurtleff, G. A.....	Stockton.
Simmons, G. L.....	Sacramento.
Simpson, James.....	San Francisco.
Smith, J. A.....	San Francisco.
Smith, W. F.....	San Francisco.
Smith, Q. C.....	Cloverdale.
Snider, T. A.....	Sacramento.
Soule, A. G.....	San Francisco.
Sproul, Samuel F.....	Chico.
Stillwagon, W. W.....	Napa.
Stockton, E. A.....	Stockton.
Stockton, Thomas C.....	San Diego.
Stout, A. B.....	San Francisco.
Strong, A.....	Woodland.
Sylvester, J.....	San Francisco.
Thorndyke, A.....	Stockton.

Thorne, W. S.....	San Jose.
Tibbitts, S. M.....	San Francisco.
I. S. Titus.....	Stockton.
Todd, T. M.....	Auburn.
Todd, F. W.....	Stockton.
Toland, C. A.....	San Francisco.
Toland, H. H.....	San Francisco.
Trafton, A.....	Woodbridge.
Trenor, E.....	Alameda.
Tucker, J. C.....	San Francisco.
Tuttle, H. P.....	Salinas City.
Twichell, W. L.....	San Francisco.
Tyrrell, G. G.....	Sacramento.
Urich, J. H.....	Geyserville.
Van Vlack, G. J.....	San Francisco.
Van Wyck, John C.....	Oakland.
Wagner, John.....	San Francisco.
Warburton, H. H.....	Santa Clara.
Wayland, James F.....	Chico.
Webster, W., U. S. A.....	Alcatraz.
Weed, G. A.....	Vallejo.
Weeks, F. L.....	San Francisco.
Welges, L.....	San Francisco.
Wells, W. H.....	Dixon.
Whitney, J. D.. ..	San Francisco.
Whitney, J. P.....	San Francisco.
White, G. A.....	Sacramento.
Widney, J. P.....	Los Angeles.
Wilkins, E. T.....	Marysville.
Willey, John M.....	San Francisco.
Williams, N.....	Richland.
Wilson, J. D.....	San Francisco.
Woolsey, —.....	Oakland.
Wooster, D.....	San Francisco.
Wythe, W. T.....	San Francisco.
Younger, A. J.....	San Francisco.
Younger, W. J.....	San Francisco.
Zimmerman, G. W.....	Cacheville.

HONORARY MEMBERS.

Joseph Hyrtl, M. D.....	Vienna, Austria.
Charles A. Cameron, M. D.....	Dublin, Ireland.
Professor Louis Agassiz.....	Massachusetts.
S. W. Thayer, M. D.....	Vermont.
J. H. Wythe, M. D.....	San Francisco, Cal.
John Le Conte, M. D.....	Oakland, Cal.
Joseph Le Conte, M. D.....	Oakland, Cal.
A. Ames, M. D.....	Boston, Mass.
P. Lansdale, M. D.....	United States Navy.
David Kindleberger, M. D.....	United States Navy.
W. E. Taylor, M. D.....	United States Navy.
S. F. Shaw, M. D.....	United States Navy.
W. M. Nickerson, M. D.....	United States Navy.
C. McCormick.....	United States Army.
R. Murray, M. D.....	United States Army.
C. C. Keeney, M. D.....	United States Army.
E. Bentley, M. D.....	United States Army.



TREASURER'S ANNUAL REPORT, CALIFORNIA STATE MEDICAL SOCIETY.

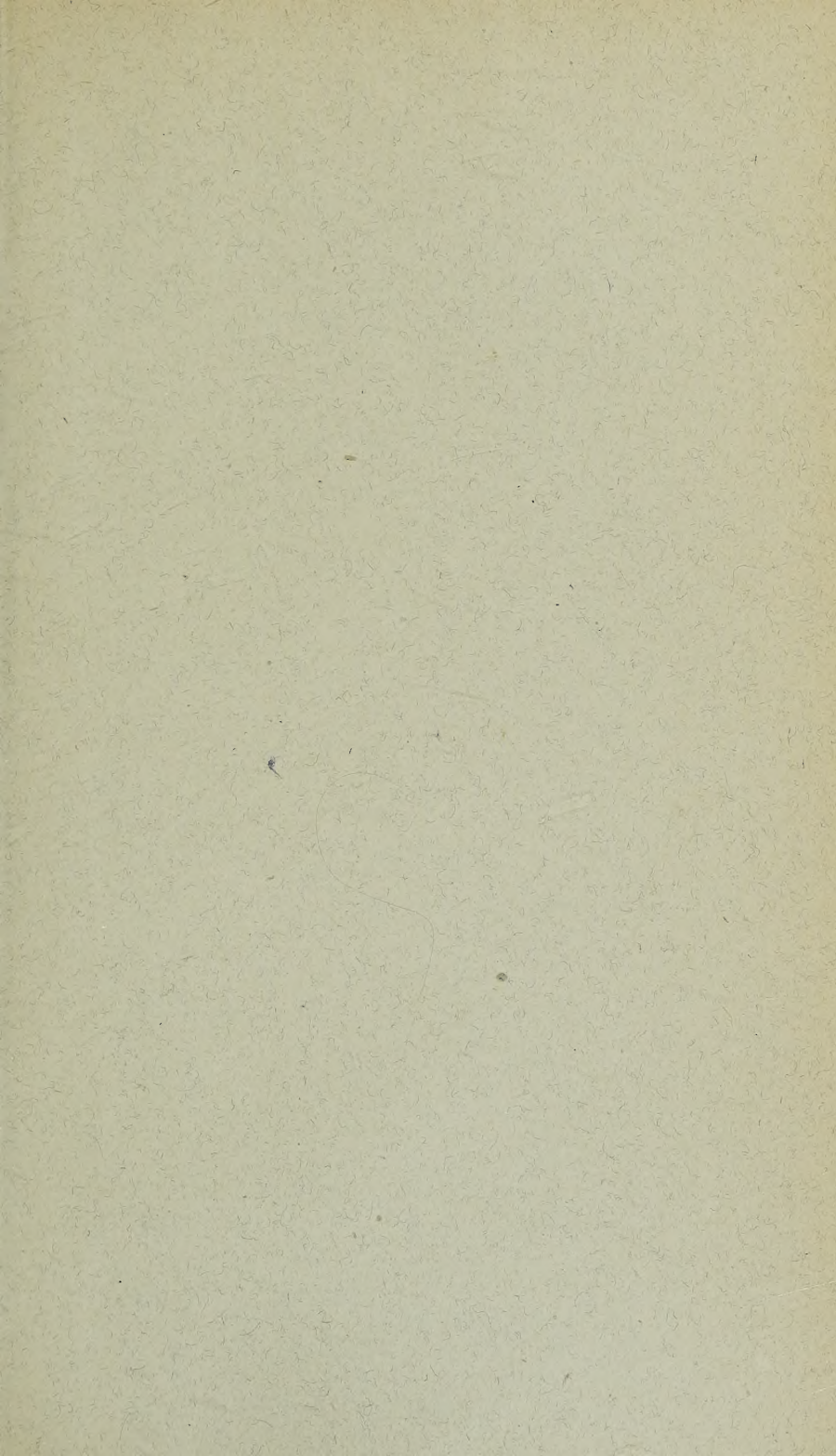
1873.	Dr.	1873.	Cr.
April 10.....	To cash, fees, per Dr. Todd.....	\$504 00	By expense, Dr. Curtis expressage on books.....
May 27.....	To cash, fees, per Dr. Tyrrell.....	120 00	By expense, rent Pioneer Hall.....
June 5.....	To cash, per A. B. Stout.....	100 00	By expense, Tingman (janitor, etc.).....
June 12.....	To cash, fees, per Dr. Tyrrell.....	85 00	By expense, Daily Record (advertising).....
August 14.....	To cash, per A. B. Stout.....	29 72	By expense, Daily Union (advertising).....
September 13.	To cash, fees, per Dr. Tyrrell.....	90 00	By expense, Dr. Logan, expenses.....
1874.			By expense, H. S. Crocker & Co. (printing).....
April 12.....	To cash, fees, per Dr. Tyrrell.....	20 00	By expense, First Ecles. Society (church rent).....
			By expense, Daily Bee (advertising).....
		\$948 72	By expense, R. C. Marsh (janitor, etc.).....
			By expense, A. S. Hopkins, envelopes.....
			By expense, Western Lancet (advertising).....
			By expense, T. A. Springer, Pr'g Tran's, 1872..
			By expense, stamps, stationery, etc.....
			By expense, stamps and stationery.....
			7 07
			\$377 87

RECAPITULATION.

Assets.....	\$948 72
Expenses.....	377 87
Balance in Treasury.....	\$570 85
Examined and found correct.	

THOMAS M. LOGAN,
R. BEVERLY COLE,
AUGUSTUS TRAFTON,

IRA E. OATMAN, Treasurer.



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